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PART I

FEDERAL REGISTER

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9

TITLE 7—AGRICULTURE

Chapter III—Agricultural Research Service, Department of Agriculture

[P. P. C. 612, 7th Rev.]

PART 301—DOMESTIC QUARANTINE NOTICES

SUBPART—KHAPRA BEETLE

REVISED ADMINISTRATIVE INSTRUCTIONS DESIGNATING PREMISES AS REGULATED AREAS

Pursuant to § 301.76–2 of the regulations supplemental to the Khapra Beetle Quarantine (7 CFR 301.76–2) under sections 8 and 9 of the Plant Quarantine Act of 1912, as amended (7 U. S. C. 161, 162), revised administrative instructions are hereby issued as follows, listing premises in which infestations of the khapra beetle have been determined to exist and designating such premises as regulated areas within the meaning of said quarantine and regulations.

§ 301.76–2a *Administrative instructions designating certain premises as regulated areas under the khapra beetle quarantine and regulations.* Infestations of the khapra beetle have been determined to exist in the premises listed in paragraphs (a) and (b) of this section. Accordingly, such premises are hereby designated as regulated areas within the meaning of the provisions in this subpart:

(a)

ARIZONA

Hayden Flour Mills, 600 West 22d Street, Tucson.

Vincent Humeumttewa Farm, Route 1, P. O. Box 59, Parker.

Richard Kinlichee Farm, Poston.

Nihighan Farm Incorporated (dairy), 3663 North Dodge Boulevard, Tucson.

Howard Sakiestewa Farm, south of Parker, Route 1, P. O. Box 49, Parker.

Morris Sevada Farm, Route 1, P. O. Box 55, Parker.

Tiemann Feed and Supply property, 2001 North Stone Avenue, Tucson.

CALIFORNIA

P. Callo property, located 2 miles west of the intersection of Roads 90 and West C on the south side of Road 90, P. O. Box 44, Niland.

Floyd B. Carrion property, located eight-tenths mile west of Lincoln Street on the south side of Avenue 70, P. O. Box 564, Mecca.

This issue includes two parts bound together. Part II contains a recapitulation of 47 CFR Part 8, Federal Communications Commission.

Erinio Jacobs property, located at the intersection of Road 88 and West C, P. O. Box 1304, Niland.

Kido Farms, located at the intersection of Roads 86 and West A, P. O. Box 587, Niland.

Kimiko Ishimino property, located at the intersection of Roads 86 and East D, P. O. Box 417, Niland.

J. M. Lask property, 331 First Street, P. O. Box 631, Niland.

Tom Mejia property, located at the south west corner of the intersection of Roads 90 and West C, P. O. Box 662, Niland.

J. O. Pairsh Farm property, P. O. Box 138, Holtville.

Penner & Firoved Farm Storage, Sec. 1, T. 11 N., R. 19 E., Arvin.

Penner & Firoved Feed Lot, Sec. 12, T. 11 N., R. 19 E., Arvin.

Eugene P. Santos property, located 1 mile south of Wister Station on Highway 111, P. O. Box 551, Niland.

Andy (Fay) Soriano property, located at the intersection of Roads 81 and East D, P. O. Box 1317, Niland.

United Food Center (Mr. Mah, owner), Niland.

United Food Store, Highway 111, Niland.

Martin Valdez property, located at the intersection of Roads 90 and West E, P. O. Box 403, Niland.

Delbert H. Valla property (formerly Gunterman Ranches), located at the intersection of Road 14 and East L Street, Calexico.

C. R. Natividad Vista property, 517 Fifth Street, P. O. Box 570, Niland.

(b) The portion of each of the following premises in which live khapra beetles were found has received the approved fumigation treatment, but these premises must continue under frequent observation and inspection for a period of one year following fumigation before a determination can be made as to the adequacy of such treatment to eradicate the khapra beetle in and upon such premises. During this period regulated articles may be moved from the premises only in accordance with the regulations in this subpart.

ARIZONA

La Salvia Dairy, Box 116, Laveen Stage, Phoenix.

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FEDERAL REGISTER

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CALIFORNIA

John Binnell (chicken ranch), 1607 South Cucamonga Avenue, Ontario.

Cal-Fed Feed Yard, located 2 miles south of Orita, 1½ miles east on Oxalio Canal, Brawley.

C. C. Huff Farm, Route 2, Box 46, Imperial.

C. E. Kline Ranch, Route 2, Box 282, El Centro.

Raleigh Roberts Farm, Route 5, Box 2405, Oroville.

Union Development Co. Warehouse, located approximately 100 yards south of the intersection of County Roads No. 86 and West A, Niland.

NEW MEXICO

M. M. Martin Farm, located 11 miles south of Tolar.

Subsequent to the sixth revision, effective November 7, 1957, an infestation of the khapra beetle was discovered on the premises of the Phoenix Indian School property, 4100 Rhoads Circle, Phoenix, Arizona; Bud E. Baldwin property, located one-fourth mile west of Lovekin on the south side of Avenue 14, Blythe, California; and John C. Freeman property, located at 501 North Lovekin, Blythe, California. Movement of regulated articles from these properties was immediately stopped. Within a few days such infested premises had been fumigated and declared free of khapra beetle infestation. Accordingly, these properties are not being included in this revision.

This revision has the effect of revoking the designation as regulated areas of certain premises in Arizona, it having been determined by the Director of the Plant Pest Control Division that adequate sanitation measures have been practiced for a sufficient length of time to eradicate the khapra beetle in and upon such premises. It also adds certain premises in Arizona and California to the list of premises in which khapra beetle infestations have been determined to exist, and designates such premises as regulated areas under the khapra beetle quarantine and regulations.

As an informative item, the revision also segregates certain regulated premises in Arizona, California, and New Mexico where the approved fumigation treatment has been applied to the portion of the premises in which live khapra beetles were found and which are consequently in a somewhat different category than untreated premises.

These administrative instructions shall become effective December 18, 1957, when they shall supersede P. P. C. 612, Sixth Revision, effective November 7, 1957 (22 F. R. 8927).

These instructions, in part, impose restrictions supplementing khapra beetle quarantine regulations already effective. They also relieve restrictions insofar as they revoke the designation of certain regulated areas. They must be made effective promptly in order to carry out the purposes of the regulations and to be of maximum benefit in permitting the interstate movement, without restriction under the quarantine, of regulated products from the premises being removed from designation as regulated areas. Accordingly, under section 4 of the Administrative Procedure Act (5 U. S. C.

1003), it is found upon good cause that notice and other public procedure with respect to the foregoing administrative instructions are impracticable and contrary to the public interest, and good cause is found for making the effective date thereof less than 30 days after publication in the Federal Register.

(Sec. 9, 37 Stat. 318, 7 U. S. C. 162. Interprets or applies sec. 8, 37 Stat. 318, as amended, 7 U. S. C. 161)

Done at Washington, D. C., this 13th day of December 1957.

[SEAL] E. D. Burgess,
Director,
Plant Pest Control Division.

[F. R. Doc. 57-10435; Filed, Dec. 17, 1957; 8:50 a. m.]

TITLE 31—MONEY AND FINANCE: TREASURY

Chapter V—Foreign Assets Control, Department of the Treasury

Part 500—Foreign Assets Control Regulations

MISCELLANEOUS AMENDMENTS

The Foreign Assets Control regulations, 31 CFR 500.101–500.808, are hereby amended by the amendment of §§ 500.204 and 500.533. The effect of the amendment of § 500.204 (a) (3) is (1) to include all cotton manufactures (other than Western style shirts) in the list of commodities dealings in which are prohibited without a license if they are located in or move from or through Hong Kong, Macao or the Soviet bloc and (2) to exclude certain silk manufactures from that list of commodities. The change in § 500.204 (a) (4) is a clarifying amendment with respect to edible marine products. The amendment to § 500.533 makes certain technical changes in that section.

1. Section 500.204 (a) (3) is hereby amended as follows:

(a) The following item,

Cotton manufactures:
  Embroideries and laces.
  Embroidered and lace articles.
  Handkerchiefs.
  Wearing apparel.

is changed to read:

Cotton manufactures, all, other than Western style shirts.

(b) The following item,

Silk:
  Raw and manufactures.
  Waste.

is changed to read;

Silk:
  Raw and manufactures other than Western style suits and Indian saris.
  Waste.

2. Section 500.204 (a) (4) is hereby amended by the addition of the item:

Edible marine products.

3. Section 500.533 is hereby amended by the deletion of paragraph (b) (3) and by changing the semicolon after the words "effective date" in paragraph (b) (2) thereof to a period and deleting the following word "and".

(Sec. 5, 40 Stat. 415, as amended; 50 U. S. C. App. 5; E. O. 9193, July 6, 1942, 7 F. R. 5205; 3 CFR, 1943 Cum. Supp., E. O. 9989, Aug. 20, 1948, 13 F. R. 4891; 3 CFR, 1948 Supp.)

[SEAL] Julian B. Baird,
Acting Secretary of the Treasury.

[F. R. Doc. 57-10429; Filed, Dec. 17, 1957; 8:48 a. m.]

TITLE 43—PUBLIC LANDS: INTERIOR

Chapter I—Bureau of Land Management, Department of the Interior

Appendix—Public Land Orders

[Public Land Order 1564]

[Idaho 05284]

Idaho

RESERVING LANDS WITHIN SALMON NATIONAL FOREST FOR USE OF FOREST SERVICE AS ADMINISTRATIVE SITES AND RECREATION AREAS

By virtue of the authority vested in the President by the act of June 4, 1897 (30 Stat. 34, 36; 16 U. S. C. 473), and otherwise, and pursuant to Executive Order No. 10355 of May 26, 1952, it is ordered as follows:

Subject to valid existing rights, the following-described public lands within the Salmon National Forest in Idaho are hereby withdrawn from all forms of appropriation under the public-land laws, including the mining but not the mineral-leasing laws, nor the act of July 31, 1947 (61 Stat. 681; 69 Stat. 367; 30 U. S. C. 601–604) as amended, and reserved for use of the Forest Service, Department of Agriculture as administrative sites and recreation areas:

Boise Meridian

FRITZER FLAT RECREATION AREA

T. 22 N., R. 18 E. (uns.),
  Sec. 35, S½NE¼NW¼ and N½N½SE¼NW¼.
  The areas described aggregate 30 acres.

OPAL LAKE RECREATION AREA

T. 18 N., R. 19 E. (uns.),
  Sec. 7, S½NW¼SW¼, N½SW¼SW¼, and W½W½SE¼SW¼.
  The areas described aggregate 50 acres.

FORNEY RECREATION AREA

T. 20 N., R. 18 E. (uns.),
  Sec. 25, SE¼NE¼NW¼, NW¼SE¼NW¼, and SE¼NE¼SW¼NW¼.
  The areas described aggregate 22.50 acres.

TRAPPER FLAT RECREATION AREA

T. 21 N., R. 18 E. (uns.),
  Sec. 12, W½SE¼NE¼, and SW¼NE¼NE¼.
  The areas described aggregate 30 acres.

DEEP CREEK RECREATION AREA

T. 21 N., R. 19 E.,
  Sec. 27, W½NW¼NW¼NW¼;
  Sec. 28, SE¼NE¼NE¼NE¼.
  The areas described aggregate 7.50 acres.

LEACOCK RECREATION AREA

T. 21 N., R. 19 E.,
  Sec. 22, W½W½NW¼NE¼ and E½E½NE¼NW¼.
  The areas described aggregate 20 acres.

WAGONHAMMER RECREATION AREA

T. 24 N., R. 21 E.,
  Sec. 22, the unpatented portion of Lot 4.
  The area described contains approximately 26 acres.

TWIN CREEK RECREATION AREA

T. 26 N., R. 21 E. (uns.),
  Sec. 3, NW¼SE¼, the unpatented portion.
  The area described contains approximately 30 acres.

ALLAN LAKE RECREATION AREA

T. 26 N., R. 22 E. (uns.),
  Sec. 33, NW¼NW¼ and SW¼NW¼.
  The areas described aggregate 80 acres.

EIGHT MILE CREEK RECREATION AREA

T. 15 N., R. 24 E. (uns.),
  Sec. 22, SE¼SE¼SE¼;
  Sec. 23, W½SW¼SW¼, unpatented portion.
  The areas described aggregate approximately 30 acres.

COUGAR RECREATION AREA

T. 20 N., R. 20 E. (uns.),
  Sec. 1, SW¼SE¼SW¼ and SW¼SW¼;
  Sec. 2, S½SE¼SE¼ and SE¼SW¼SE¼;
  Sec. 11, NE¼NW¼NE¼ and N½NE¼NE¼;
  Sec. 12, NW¼NW¼ and W½NE¼NW¼.
  The areas described aggregate 180 acres.

CUNNINGHAM BAR RECREATION AREA

T. 23 N., R. 14 E. (uns.),
  Sec. 1, NW¼SW¼NE¼.
  The area described contains 10 acres.

LONG TOM RECREATION AREA

T. 23 N., R. 16 E. (uns.),
  Sec. 27, NW¼NE¼SW¼.
  The area described contains 10 acres.

EBENEZER RECREATION AREA

T. 23 N., R. 17 E. (uns.),
  Sec. 19, SE¼NW¼SE¼.
  The area described contains 10 acres.

HORSE CREEK RECREATION AREA

T. 24 N., R. 14 E. (uns.),
  Sec. 21, SE¼SE¼SE¼;
  Sec. 22, SW¼SW¼SW¼;
  Sec. 27, NW¼NW¼NW¼;
  Sec. 28, NE¼NE¼NE¼.
  The areas described aggregate 40 acres.

HORSE CREEK HOT SPRINGS RECREATION AREA

T. 25 N., R. 17 E. (uns.),
  Sec. 15, W½NE¼, E½NW¼SE¼, W½NE¼SE¼, E½SW¼SE¼, and W½SE¼SE¼;
  Sec. 22, NE¼NE¼.
  The areas described aggregate 200 acres.

MIDDLE FORK RECREATION AREA

T. 23 N., R. 16 E. (uns.),
  Sec. 28, NE¼SW¼SE¼.
  The area described contains 10 acres.

COLSON CREEK RECREATION AREA

T. 23 N., R. 16 E. (uns.),
  Sec. 1, E½SE¼NW¼.
  The area described contains 20 acres.

BEAR CAMP RECREATION AREA

T. 24 N., R. 16 E. (uns.),
  Sec. 34, S½NE¼NE¼.
  The area described contains 20 acres.

SPRING CREEK RECREATION AREA

T. 24 N., R. 18 E. (uns.),
  Sec. 12, SE¼NW¼.
  The area described contains 40 acres.

BANKERS ISLAND RECREATION AREA

T. 23 N., R. 17 E. (uns.),
  Sec. 20, S½SW¼NE¼.
  The area described contains 20 acres.

STODDARD CREEK RECREATION AREA

T. 22 N., R. 15 E. (uns.),
  Sec. 13, S½SW¼NW¼.
  The area described contains 20 acres.

SWAMP CAMP RECREATION AREA

T. 24 N., R. 16 E. (uns.),
Sec. 25, SW¼NW¼NW¼;
Sec. 26, SE¼NE¼NE¼.
The areas described aggregate 20 acres.

CACHE BAR RECREATION AREA

T. 23 N., R. 16 E. (uns.),
Sec. 18, SW¼SW¼SW¼.
The area described contains 10 acres.

YELLOWJACKET RECREATION AREA

T. 19 N., R. 17 E. (uns.),
Sec. 8, SW¼SW¼SW¼.
The area described contains 10 acres.

WARM SPRING CREEK RESERVATION AREA

T. 18 N., R. 17 E. (uns.),
Sec. 33, E½SE¼NE¼;
Sec. 34, SW¼SW¼NW¼.
The areas described aggregate 30 acres.

SURVEY CREEK RECREATION AREA

T. 20 N., R. 14 E.,
Sec. 22, lots 1 and 4.
The areas described aggregate 46.70 acres.

CATHEDRAL ROCK RECREATION AREA

T. 21 N., R. 16 E.,
Sec. 36, SW¼NE¼ (unsurveyed).
The area described contains 40 acres.

CRAGS RECREATIONAL AREA

T. 21 N., R. 16 E.,
Sec. 36, NW¼SE¼SE¼ (unsurveyed).
The area described contains 10 acres.

HAYDEN CREEK RECREATION AREA

T. 17 N., R. 23 E.,
Sec. 27, S½NW¼SE¼ and SW¼SE¼;
Sec. 34, W½NE¼ and W½SE¼.
The areas described aggregate 220 acres.

CATHEDRAL LAKE RECREATION AREA

T. 21 N., R. 16 E. (uns.),
Sec. 24, NW¼SW¼.
The area described contains 40 acres.

GOLDEN TROUT LAKE RECREATION AREA

T. 21 N., R. 17 E. (uns.),
Sec. 31, NW¼NW¼.
The area described contains 40 acres.

YELLOWJACKET LAKE RECREATION AREA

T. 20 N., R. 16 E. (uns.),
Sec. 14, SW¼NW¼NE¼, NW¼SW¼NE¼, and NE¼SE¼NW¼.
The areas described aggregate 30 acres.

SHIP ISLAND LAKES RECREATION AREA

T. 21 N., R. 16 E. (uns.),
Sec. 6, SE¼SE¼;
Sec. 8, NW¼ and E½SW¼;
Sec. 9, NE¼;
Sec. 16, NW¼ and NW¼SW¼;
Sec. 17, NW¼NE¼ and SE¼NW¼.
The areas described aggregate 720 acres.

WELCOME LAKE RECREATION AREA

T. 21 N., R. 16 E. (uns.),
Sec. 21, W½SE¼.
The area described contains 80 acres.

HEART LAKE RECREATION AREA

T. 21 N., R. 16 E. (uns.),
Sec. 21, NE¼NW¼.
The area described contains 40 acres.

TERRACE LAKES RECREATION AREA

T. 21 N., R. 16 E. (uns.),
Sec. 20, S½NE¼;
Sec. 21, SW¼NW¼.
The areas described aggregate 120 acres.

WILSON BASIN LAKES RECREATION AREA

T. 21 N., R. 16 E. (uns.),
Sec. 28, SW¼;
Sec. 29, S½;
Sec. 32;
Sec. 33, W½.
The areas described aggregate 1,440 acres.

SHEWAY LAKE RECREATION AREA

T. 25 N., R. 22 E. (uns.),
Sec. 3, NW¼SE¼.
The area described contains 40 acres.

WILLIAMS LAKE RECREATION AREA

T. 20 N., R. 21 E.,
Sec. 33, Lots 1, 2, 3, 4, 5 and 6.
The areas described aggregate 186.25 acres.

IRON LAKE RECREATION AREA

T. 18 N., R. 19 E. (uns.),
Sec. 2, SW¼SW¼;
Sec. 11, NW¼NW¼.
The areas described aggregate 80 acres.

COOPER CREEK ADMINISTRATIVE SITE

T. 20 N., R. 19 E. (uns.),
Sec. 18, W½SE¼NW¼ and E½E½SW¼NW¼.
The areas described aggregate 30 acres.

JUREANO LOOKOUT ADMINISTRATIVE SITE

T. 22 N., R. 19 E. (uns.),
Sec. 29, SE¼NW¼SE¼.
The area described contains 10 acres.

BLACKBIRD LOOKOUT ADMINISTRATIVE SITE

T. 21 N., R. 17 E. (uns.),
Sec. 25, NE¼SW¼SW¼.
The area described contains 10 acres.

GANT MOUNTAIN LOOKOUT ADMINISTRATIVE SITE

T. 22 N., R. 18 E. (uns.),
Sec. 17, NW¼SE¼SE¼.
The area described contains 10 acres.

HOT SPRINGS LOOKOUT ADMINISTRATIVE SITE

T. 23 N., R. 18 E. (uns.),
Sec. 16, NE¼SW¼NE¼SW¼.
The area described contains 2.50 acres.

SAGEBRUSH LOOKOUT ADMINISTRATIVE SITE

T. 22 N., R. 17 E. (uns.),
Sec. 3, NE¼NE¼, SE¼NW¼NE¼, and NE¼SW¼NE¼.
The areas described aggregate 60 acres.

LICK CREEK ADMINISTRATIVE SITE

T. 25 N., R. 21 E. (uns.),
Sec. 1, N½SE¼NW¼, N½SW¼NE¼, and NW¼SE¼NE¼.
The areas described aggregate 50 acres.

HUGHES CREEK ADMINISTRATIVE SITE, ADDITION #1

T. 25 N., R. 21 E. (uns.),
Sec. 15, SW¼SW¼SW¼, unpatented portion;
Sec. 21, NE¼NE¼NE¼, unpatented portion;
Sec. 22, NW¼NW¼NW¼, unpatented portion.
The areas described aggregate approximately 30 acres.

HUGHES CREEK ADMINISTRATIVE SITE, ADDITION NO. 2

T. 25 N., R. 21 E. (uns.),
Sec. 15, S½SW¼NW¼, NW¼SW¼, and SW¼SE¼NW¼, unpatented portion;
Sec. 16, S½SE¼NE¼ and NE¼SE¼.
The areas described aggregate approximately 120 acres.

ANDERSON MOUNTAIN LOOKOUT ADMINISTRATIVE SITE

T. 26 N., R. 22 E. (uns.),
Sec. 6, NW¼SW¼NW¼.
The area described contains 10 acres.

GRANITE MOUNTAIN TRAINING CAMP ADMINISTRATIVE SITE

T. 26 N., R. 21 E. (uns.),
Sec. 28, SW¼SE¼SE¼.
The area described contains 10 acres.

GRANITE MOUNTAIN LOOKOUT ADMINISTRATIVE SITE

T. 26 N., R. 21 E. (uns.),
Sec. 28, SW¼SW¼SE¼.
The area described contains 10 acres.

STEIN MOUNTAIN LOOKOUT ADMINISTRATIVE SITE

T. 25 N., R. 22 E. (uns.),
Sec. 32, NW¼NE¼.
The area described contains 40 acres.

WILLIAMS CREEK ADMINISTRATIVE SITE

T. 20 N., R. 20 E. (uns.),
Sec. 12, E½NE¼NW¼, NW¼NE¼, S½NE¼NE¼, N½SE¼NE¼, and N½NE¼SW¼NE¼;
T. 20 N., R. 21 E. (uns.),
Sec. 7, S½SW¼NW¼NW¼ and NW¼SW¼NW¼.
The areas described aggregate 120 acres.

NAPOLEON HILL LOOKOUT ADMINISTRATIVE SITE

T. 23 N., R. 21 E.,
Sec. 5, SW¼SW¼SE¼, (uns.).
The area described contains 10 acres.

LAKE MOUNTAIN LOOKOUT ADMINISTRATIVE SITE

T. 20 N., R. 20 E.,
Sec. 34, NE¼NE¼NW¼, (uns.).
The area described contains 10 acres.

CHINA SPRINGS ADMINISTRATIVE SITE

T. 20 N., R. 20 E.,
Sec. 34, N½NE¼SW¼, (uns.).
The area described contains 20 acres.

SHEEPHORN LOOKOUT ADMINISTRATIVE SITE

T. 18 N., R. 20 E.,
Sec. 15, NE¼NW¼SW¼.
The area described contains 10 acres.

COVE CREEK ADMINISTRATIVE SITE

T. 23 N., R. 17 E. (uns.),
Sec. 11, NE¼SW¼SE¼ and N½SE¼SE¼;
Sec. 12, SW¼SW¼SW¼.
The areas described aggregate 40 acres.

SQUAW CREEK ADMINISTRATIVE SITE

T. 24 N., R. 19 E. (uns.),
Sec. 10, E½NE¼SE¼;
Sec. 11, N½SW¼SW¼, SW¼NW¼SW¼, and S½SE¼SW¼;
Sec. 14, N½NE¼NW¼.
The areas described aggregate 90 acres.

INDIANOLA ADMINISTRATIVE SITE

T. 24 N., R. 19 E. (uns.),
Sec. 24, SW¼NW¼NE¼, SW¼NE¼, N½SE¼NE¼, and SE¼SE¼NE¼, unpatented portions.
The areas described aggregate approximately 70 acres.

COLSON CREEK ADMINISTRATIVE SITE

T. 23 N., R. 16 E. (uns.),
Sec. 24, NW¼NE¼.
The area described contains 40 acres.

LONG TOM LOOKOUT ADMINISTRATIVE SITE

T. 23 N., R. 16 E. (uns.),
Sec. 10, NE¼.
The area described contains 160 acres.

BEAR TRAP LOOKOUT ADMINISTRATIVE SITE

T. 24 N., R. 17 E. (uns.),
Sec. 23, SW¼SW¼SW¼.
The area described contains 10 acres.

OREANO LOOKOUT ADMINISTRATIVE SITE

T. 25 N., R. 17 E. (uns.),
Sec. 21, SW¼SE¼SW¼.
The area described contains 10 acres.

ULYSSES LOOKOUT ADMINISTRATIVE SITE

T. 24 N., R. 20 E. (uns.),
Sec. 9, NW¼NE¼NW¼.
The area described contains 10 acres.

HORSE HEAVEN LOOKOUT ADMINISTRATIVE SITE

T. 22 N., R. 16 E. (uns.),
Sec. 1, SW¼SW¼;
Sec. 2, SE¼SE¼;
Sec. 11, NE¼NE¼;
Sec. 12, NW¼NW¼.
The areas described aggregate 160 acres.

BUTTS CREEK POINT LOOKOUT ADMINISTRATIVE SITE

T. 23 N., R. 14 E. (uns.),
Sec. 4, SE¼NW¼SE¼.
The area described contains 10 acres.

WEST HORSE LOOKOUT ADMINISTRATIVE SITE

T. 24 N., R. 14 E., (uns.),
Sec. 17, N½NE¼NW¼.
The area described contains 20 acres.

BLUE NOSE LOOKOUT ADMINISTRATIVE SITE

T. 25 N., R. 18 E. (uns.),
Sec. 28, NE¼NW¼ and E½NW¼NW¼, that portion in Idaho.

The areas described aggregate approximately 60 acres.

STORMY PEAK LOOKOUT ADMINISTRATIVE SITE

T. 23 N., R. 19 E. (uns.),
Sec. 3, E½NE¼SW¼, W½NW¼SE¼, W½ SW¼SE¼, and E½SE¼SW¼.
The areas described aggregate 80 acres.

STODDARD LOOKOUT ADMINISTRATIVE SITE

T. 22 N., R. 14 E. (uns.),
Sec. 28, SW¼SW¼, SE¼SW¼;
Sec. 33, NW¼NW¼, NE¼NW¼, and N½ SW¼NW¼.
The areas described aggregate 180 acres.

NOLAN POINT LOOKOUT ADMINISTRATIVE SITE

T. 23 N., R. 14 E. (uns.),
Sec. 36, SE¼SE¼.
The area described contains 40 acres.

SKUNK CAMP LOOKOUT ADMINISTRATIVE SITE

T. 24 N., R. 15 E. (uns.),
Sec. 13, NE¼NE¼SW¼.
The area described contains 10 acres.

YELLOWJACKET ADMINISTRATIVE SITE

T. 19 N., R. 17 E. (uns.),
Sec. 9, NW¼NW¼.
The area described contains 40 acres.

WATERFALL ADMINISTRATIVE SITE

T. 21 N., R. 14 E. (uns.),
Sec. 34, S½NE¼SE¼ and SE¼SE¼;
Sec. 35, S½NW¼SW¼ and W½SW¼SW¼;
T. 20 N., R. 14 E.,
Sec. 2, NW¼NW¼NW¼, (uns.);
Sec. 3, E½NE¼ (uns.).
The areas described aggregate 190 acres.

BERNARD CREEK ADMINISTRATIVE SITE

T. 19 N., R. 14 E.,
Sec. 15, lot 7;
Sec. 22, lots 2 and 3.
The areas described aggregate 91.76 acres.

HOODOO MEADOWS ADMINISTRATIVE SITE

T. 20 N., R. 16 E. (uns.),
Sec. 14, SE¼SW¼ and SE¼SW¼SW¼;
Sec. 23, NW¼NE¼NW¼ and E½NW¼ NW¼.
The areas described aggregate 80 acres.

RED ROCK LOOKOUT ADMINISTRATIVE SITE

T. 19 N., R. 17 E. (uns.),
Sec. 2, S½SW¼SE¼;
Sec. 11, N½NW¼NE¼.
The areas described aggregate 40 acres.

MIDDLE FORK PEAK LOOKOUT ADMINISTRATIVE SITE

T. 19 N., R. 15 E. (uns.),
Sec. 13, E½SW¼ and W½SE¼;
Sec. 24, E½NE¼ and W½NE¼.
The areas described aggregate 320 acres.

DUCK CREEK POINT LOOKOUT ADMINISTRATIVE SITE

T. 18 N., R. 17 E. (uns.),
Sec. 5, SW¼SW¼.
The area described contains 40 acres.

BEAR CREEK POINT LOOKOUT ADMINISTRATIVE SITE

T. 18 N., R. 13 E. (uns.),
Sec. 13, SE¼SE¼.
The area described contains 40 acres.

SHORT CREEK LOOKOUT ADMINISTRATIVE SITE

T. 19 N., R. 14 E.,
Sec. 5, SW¼SW¼.
The area described contains 40 acres.

CAMAS CREEK ADMINISTRATIVE SITE

T. 18 N., R. 14 E. (uns.),
Sec. 14, NW¼SW¼.
The area described contains 40 acres.

DRY GULCH ADMINISTRATIVE SITE

T. 18 N., R. 16 E. (uns.),
Sec. 16, W½SW¼NW¼ and NW¼NW¼ SW¼;
Sec. 17, E½SE¼NE¼ and E½NE¼SE¼.
The areas described aggregate 70 acres.

BALDY MOUNTAIN ADMINISTRATIVE SITE

T. 21 N., R. 21 E.,
Sec. 17, SW¼SW¼.
The area described contains 40 acres.

The total areas aggregate approximately 6,683.21 acres.

This order shall be subject to existing withdrawals for other than national forest purposes so far as they affect any of the above-described lands, and shall take precedence over, but not otherwise affect the existing reservation of the lands for national forest purposes.

ROGER ERNST,
Assistant Secretary of the Interior.

DECEMBER 12, 1957.

[F. R. Doc. 57-10412; Filed, Dec. 17, 1957; 8:46 a. m.]

PROPOSED RULE MAKING

DEPARTMENT OF THE INTERIOR

Office of Oil and Gas

[30 CFR Part 302]

REPORTS AND INSPECTIONS OF FACILITIES AND AGENCIES FOR PRODUCTION, PROCESSING, STORAGE AND TRANSPORTATION OF PETROLEUM AND PETROLEUM PRODUCTS

RETENTION OF RECORDS

The statute of limitations for criminal offenses was amended by the act of September 1, 1954 (18 U. S. C., 1952 ed., Supp. II, sec. 3282), by changing from three years to five years the period within which prosecutions may be brought. It is therefore considered desirable to amend the regulations requiring persons and companies subject to the Connally "Hot Oil" Act (15 U. S. C., secs. 715-715k) to retain their records for five rather than three years. The act in question relates to the interstate transportation of petroleum produced, transported, or withdrawn from storage in excess of the amounts permitted to be produced, transported, or withdrawn from storage under State law or authorized State regulation. The records referred to are covered by § 302.6 of Title 30 of the Code of Federal Regulations and include such items as allowable production, inventories, actual production, consumption, deliveries, receipts, gauge tickets, shipping documents, and other matters relevant under the act.

Therefore it is proposed to amend 30 CFR 302.6 by changing the proviso in the introductory paragraph to read as follows: "*Provided*, That when such records have been retained for a period of not less than 5 years the board may, upon written request of the operator, grant permission to destroy or dispose of such records."

(Sec. 5 (a), 49 Stat. 30, 15 U. S. C., sec. 715d; E. O. 7756, 2 F. R. 2664; E. O. 10250, 16 F. R. 5385)

Prior to the adoption of the proposed amendment, consideration will be given to any data, views, or arguments pertaining thereto which are submitted in writing to the Secretary of the Interior, Washington 25, D. C., and received within the period of 30 days from the date of publication of this notice in the FEDERAL REGISTER.

HATFIELD CHILSON,
Under Secretary of the Interior.

DECEMBER 11, 1957.

[F. R. Doc. 57-10414; Filed, Dec. 17, 1957; 8:46 a. m.]

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

[7 CFR Part 52]

U. S. STANDARDS FOR GRADES OF FROZEN SPINACH

EXTENSION OF TIME TO SUBMIT DATA, VIEWS, AND ARGUMENTS

A second proposal for revision of United States Standards for Grades of Frozen Spinach was set forth in the notice which was published in the FEDERAL REGISTER on August 22, 1957 (22 F. R. 6767).

In consideration of data, comments, and suggestions received indicating the need for further study of the proposed changes, notice is hereby given of an extension until December 15, 1958, of the period of time within which written data, views, and arguments may be submitted by interested parties for consideration in connection with the aforesaid proposed revision of United States Standards for Grades of Frozen Spinach.

Dated: December 13, 1957.

[SEAL] ROY W. LENNARTSON,
Deputy Administrator,
Marketing Services.

[F. R. Doc. 57-10434; Filed, Dec. 17, 1957; 8:49 a. m.]

NOTICES

DEPARTMENT OF STATE

Office of the Secretary

[Public Notice 154]

[Delegation of Authority 85-3]

Administration of Mutual Security Act of 1954 and Delegation of Certain Related Functions

By virtue of the authority vested in me by Executive Order No. 10610, as amended, the Mutual Security Act of 1954 (68 Stat. 832), as amended, section 4 of the act of May 26, 1949 (63 Stat. 111, 5 U. S. C. 151c), as amended, and as Secretary of State, Delegation of Authority No. 85 of June 30, 1955 (20 F. R. 4825), as heretofore amended, is hereby amended as follows:

1. The title is amended to read as follows: "Administration of Mutual Security Act of 1954 and Delegation of Certain Related Functions".

2. Section 2 is amended by inserting before the period at the end thereof "and authorize any of his subordinates to whom functions are so delegated or assigned successively to redelegate or reassign any of such functions."

3. Sections 3 and 4 are repealed.

4. A new section 3 is inserted to read as follows:

3. *Functions of the Deputy Under Secretary of State for Economic Affairs.* (a) The Deputy Under Secretary of State for Economic Affairs shall, on behalf of the Secretary of State, carry out the following functions:

(1) The function of having primary responsibility for preparation and presentation to the Congress of such programs of foreign military, economic, technical and other assistance as may be required in the interest of the security of the United States;

(2) The function of coordinating the various forms of assistance authorized by the Mutual Security Act of 1954;

(3) The function of ensuring that the assistance authorized by the Mutual Security Act of 1954 serves the foreign policies of the United States;

(4) The function of determining the value of the program under chapter 1, title I of the Mutual Security Act of 1954 for any country;

(5) The function of coordinating the functions of the International Cooperation Administration with the other affairs of the Department of State;

(b) The Deputy Under Secretary of State for Economic Affairs may, to the extent consistent with law, delegate or assign any of his functions to his subordinates.

5. A new section 4 is inserted to read as follows:

4. *Functions of the International Cooperation Administration or the Director thereof.* (a) Except as otherwise provided in this delegation of authority with respect to the functions of the Deputy Under Secretary of State for Economic Affairs, the Director of the International Cooperation Administration shall, under the direction and control of the Secretary of State, carry out the following functions:

(1) The functions transferred by section 101 of Executive Order 10610;

(2) The functions under sections 202 and 204 of the Mutual Security Act of 1954 delegated to the Secretary of State by section 103 (a) (2) of Executive Order 10575, subject to policy guidance received from the Development Loan Committee established by section 1 (c) of Executive Order No. 10742 of November 29, 1957;

(3) Subject to the concurrence of the Deputy Under Secretary of State for Economic Affairs, the function of agreeing with the Department of Defense on a division of the sum provided for in section 402 of the Mutual Security Act of 1954;

(4) The functions which the Department of State is directed to carry out by section 4 (d) (3) of Executive Order 10560 relating to foreign currencies generated by sales under the Agricultural Trade Development and Assistance Act of 1954, as amended, to carry out the purposes of section 104 (c) of the act.

(b) The Director of the International Cooperation Administration or his designees may from time to time, to the extent consistent with law, promulgate such rules and regulations as may be necessary and proper to carry out any functions of the International Cooperation Administration or the Director or agencies, officers or employees thereof.

6. Section 6 is amended by deleting therefrom the words "required to be carried out by or under the International Cooperation Administration or the Director pursuant to section 103 (a) of Executive Order No. 10610, or".

7. Section 7 is redesignated section 8, and section 8 (c) is amended to read as follows:

(c) Any reference in this order to the Mutual Security Act of 1954 or to any other act shall be deemed to be a reference to such act as amended from time to time. Any reference in this order to any Executive order or order delegating functions thereunder shall be deemed to be a reference to such order as amended from time to time.

8. A new section 7 is inserted to read as follows:

7. *Authority and responsibilities of the Secretary of State.* Nothing in this order shall be construed to derogate from any authority, responsibilities, or functions previously held or exercised by the Secretary of State or the various bureaus and other offices of the Department of State.

Dated: December 5, 1957.

John Foster Dulles,
Secretary of State.

[F. R. Doc. 57-10415; Filed, Dec. 17, 1957; 8:46 a. m.]

DEPARTMENT OF THE TREASURY

Foreign Assets Control

Natural (Undyed) Hog Bristle of Japanese Origin

AVAILABILITY OF LICENSES FOR IMPORTATION

Notice is hereby given that the Treasury Department is now prepared to consider applications for licenses under the Foreign Assets Control regulations (31 CFR 500.101-500.808), for the purchase and importation from Japan of Japanese natural (undyed) hog bristle. Licenses issued pursuant to such applications will authorize the importation of Japanese natural bristle for entry into warehouse. The release from warehouse of bristle imported pursuant to such licenses will be authorized only after the Foreign Assets Control is satisfied by physical inspection of the merchandise, and such other measures as may be appropriate, that the merchandise consists solely of Japanese natural hog bristle.

Applicants are advised that the fact that a licensee has paid for bristle under a license will not be considered a factor warranting release of the bristle from warehouse unless the bristle is found by Foreign Assets Control to consist entirely of natural (undyed) Japanese bristle.

[SEAL] Elting Arnold,
Acting Director,
Foreign Assets Control.

[F. R. Doc. 57-10430; Filed, Dec. 17, 1957; 8:49 a. m.]

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[Serial No. Idaho 07868]

Idaho

ORDER PROVIDING FOR OPENING OF PUBLIC LANDS

December 10, 1957.

In exchanges of lands made under the provisions of section 8 of the act of June 28, 1934 (48 Stat. 1269); as amended June 26, 1936 (49 Stat. 1976; 43 U. S. C. 315g) the following-described lands have been reconveyed to the United States:

Boise Meridian, Idaho

T. 6 S., R. 5 E.,
  Sec. 26, W½W½, E½SW¼, SW¼SE¼;
  Sec. 27, SE¼NE¼, SE¼;
  Sec. 34, N½NE¼;
  Sec. 35, NW¼NW¼.
T. 4 S., R. 6 E.,
  Sec. 28, SW¼NE¼, NW¼, NW¼SE¼, S½SE¼;
  Sec. 29, NE¼, S½;
  Sec. 30, Lots 1 and 2, SE¼;
  Sec. 32, NE¼;
  Sec. 33, NW¼.
T. 5 S., R. 11 E.,
  Sec. 24, SW¼SE¼, E½SE¼;
  Sec. 25, N½NE¼.
T. 9 S., R. 12 E.
  Sec. 26, N½SW¼.
T. 16 S., R. 12 E.,
  Sec. 6, Lots 2 and 3, SW¼NE¼, SE¼NW¼, NE¼SW¼, W½SE¼.

T. 6 S., R. 13 E.,
  Sec. 2, N½SW¼, NW¼SE¼;
  Sec. 6, Lot 3, SE¼NW¼;
  Sec. 11, E½NW¼.
T. 16 S., R. 16 E.,
  Sec. 15, SE¼.
T. 15 S., R. 17 E.,
  Sec. 35, S½SW¼.
T. 16 S., R. 17 E.,
  Sec. 2, N½, NW¼SW¼, SE¼;
  Sec. 3, NE¼SE¼.
T. 6 S., R. 22 E.,
  Sec. 25, E½SW¼, S½SE¼.
T. 7 S., R. 22 E.,
  Sec. 24, NW¼NW¼.
T. 14 S., R. 22 E.,
  Sec. 29, NE¼, E½W½.
T. 6 S., R. 23 E.,
  Sec. 34, W½NE¼.
T. 6 S., R. 24 E.,
  Sec. 29, E½NE¼, NE¼SE¼;
  Sec. 31, Lots 2, 5 and 6.
T. 15 S., R. 26 E.,
  Sec. 33, SW¼NE¼, NW¼SE¼.
T. 15 S., R. 27 E.,
  Sec. 11, N½.
T. 10 S., R. 29 E.,
  Sec. 9, W½SE¼;
  Sec. 10, NW¼NE¼.
T. 3 S., R. 30 E.,
  Sec. 21, NW¼, E½SW¼.
T. 5 S., R. 30 E.,
  Sec. 7, Lots 1 and 2, NE¼, E½NW¼.
T. 4 S., R. 31 E.,
  Sec. 21, E½SW¼, SW¼SE¼.
T. 1 N., R. 32 E.,
  Sec. 7, E½SW¼.
T. 1 S., R. 32 E.,
  Sec. 4, SW¼SW¼;
  Sec. 5, SW¼, W½SE¼, SE¼SE¼;
  Sec. 6, SE¼;
  Sec. 7, E½NE¼;
  Sec. 8, N½, N½S½, S½SE¼;
  Sec. 9, NW¼.
T. 2 S., R. 32 E.,
  Sec. 14, W½SW¼, NE¼SW¼.
T. 13 S., R. 32 E.,
  Sec. 27, SE¼NE¼, NE¼SE¼.
T. 7 N., R. 33 E.,
  Sec. 19, SE¼;
  Sec. 35, SE¼NW¼, NW¼SW¼.
T. 1 S., R. 33 E.,
  Sec. 29, E½NE¼, NW¼NE¼, NE¼NW¼.
T. 8 S., R. 38 E.,
  Sec. 24, NW¼SE¼.
T. 6 N., R. 1 W.,
  Sec. 29, SW¼.

The areas described total 7,855.84 acres of public lands.

The lands are widely scattered throughout Idaho and are typical of dry-grazing lands in the area. The soils vary from lava ash and silt loam to sandy and gravelly deposits. In some areas rock outcropping or float rock occur. Vegetation is generally perennial grassland or sagebrush grassland type, with some annual weeds. The land is mainly suited to the grazing of livestock. The SW¼SE¼, E½SE¼, Sec. 15, T. 16 S., R. 16 E. and NE¼SE¼, Sec. 3, T. 16 S., R. 17 E. are subject to Range improvement No. 2015180, the Lost Creek Driveway. The SE¼NE¼, and NE¼SE¼, Sec. 27, T. 13 S., R. 32 E., B. M. were reconveyed to the United States under Title III of the Bankhead Jones Act and are subject to exchange only.

No application for these lands will be allowed under the homestead, desert land, small tract, or any other nonmineral public land law, unless the lands have already been classified as valuable or suitable for such type of application, or shall be so classified upon consideration of an application. Any application that is filed will be considered on its merits. The lands will not be subject to occupancy or disposition until they have been classified.

Subject to any valid existing rights and the requirements of applicable laws, the lands described herein are hereby opened to filing of applications, selections and locations in accordance with the following:

a. Applications and selections under the nonmineral public land laws and applications and offers under the mineral leasing laws may be presented to the Manager mentioned below, beginning on the date of this order. Such applications, selections, and offers will be considered as filed on the hour and respective dates shown for the various classes enumerated in the following paragraphs:

(1) Applications by persons having prior existing valid settlement rights, preference rights conferred by existing laws, or equitable claims, subject to allowance and confirmation will be adjudicated on the facts presented in support of each claim or right. All applications presented by persons other than those referred to in this paragraph will be subject to the application and claims mentioned in this paragraph.

(2) All valid applications under the homestead, desert land and small tract laws by qualified veterans of World War II and, or, the Korean Conflict, and by others entitled to preference rights under the act of September 27, 1944 (58 Stat. 747; 43 U. S. C. 279 through 284, as amended), presented prior to 10:00 a. m., on January 15, 1958, will be considered as simultaneously filed at that hour. Rights under such preference right applications filed after that hour and before 10:00 a. m. on April 16, 1958 will be governed by the time of filing.

(3) All valid applications and selections under the nonmineral public land laws other than those coming under paragraphs (1) and (2) above, and applications and offers under the mineral leasing laws, presented prior to 10:00 a. m. on April 16, 1958, will be considered as simultaneously filed at that hour. Rights under such applications and selections filed after that hour will be governed by the time of filing.

b. The lands will be opened to location under the United States mining laws, beginning 10:00 a. m. on April 16, 1958.

Persons claiming veteran's preference rights under Paragraph a (2) above must enclose with their applications proper evidence of military or naval service, preferably a complete photostatic copy of the certificate of honorable discharge. Persons claiming preference rights based upon valid settlement, statutory preference, or equitable claims must enclose properly corroborated statements in support of their applications, setting forth all facts relevant to their claims. Detailed rules and regulations governing applications which may be filed pursuant to this notice can be found in Title 43 of the Code of Federal Regulations.

Inquiries concerning these lands shall be addressed to the Manager, Land Office, Bureau of Land Management, P. O. Box 2237, Boise, Idaho.

MICHAEL T. SOLAN,
Acting State Supervisor.

[F. R. Doc. 57-10413; Filed, Dec. 17, 1957; 8:46 a. m.]

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

HANNIBAL SALES CO., INC., ET AL.

DEPOSTING OF STOCKYARDS

It has been ascertained that the Hannibal Sales Co., Inc., Hannibal, Missouri, originally posted on July 18, 1957, as being subject to the Packers and Stockyards Act, 1921, as amended (7 U. S. C. 181 et seq.), and the Kelly & Holmes Auction Sale, Heber Springs, Arkansas, originally posted on July 13, 1957, as being subject to said act, no longer come within the definition of a stockyard under said act for the reason that they no longer meet the area requirements. Accordingly, notice is given to the owners thereof and to the public that such livestock markets are no longer subject to the provisions of the act.

Notice or other public procedure has not preceded promulgation of the foregoing rule since it is found that the giving of such notice would prevent the due and timely administration of the Packers and Stockyards Act and would, therefore, be impracticable and contrary to the public interest. There is no legal warrant or justification for not deposting promptly a stockyard which no longer is within the definition of that term contained in said act.

The foregoing is in the nature of a rule granting an exemption or relieving a restriction and, therefore, may be made effective in less than 30 days after publication in the FEDERAL REGISTER. This notice shall become effective upon publication in the FEDERAL REGISTER.

(42 Stat. 159, as amended and supplemented; 7 U. S. C. 181 et seq.)

Done at Washington, D. C., this 12th day of December 1957.

[SEAL] JOHN C. PIERCE, Jr.,
Acting Director, Livestock Division, Agricultural Marketing Service.

[F. R. Doc. 57-10407; Filed, Dec. 17, 1957; 8:45 a. m.]

CASA GRANDE CATTLE & FEED CO., INC., ET AL.

POSTED STOCKYARDS

Pursuant to the authority delegated to the Director, Livestock Division, Agricultural Marketing Service, United States Department of Agriculture, under the Packers and Stockyards Act, 1921, as amended (7 U. S. C. 181 et seq.), on the respective dates specified below, it was ascertained that the livestock markets named below were stockyards within the definition of that term contained in section 302 of the act (7 U. S. C. 202) and were, therefore, subject to the act, and notice was given to the owners and to the public by posting notice at the stockyard as required by said section 302.

Name of Stockyard and Date of Posting

ARIZONA

Casa Grande Cattle & Feed Company, Inc., Casa Grande; October 15, 1957.

Cornelius Livestock Co., Phoenix; October 16, 1957.

Wentz Brothers Livestock Auction, Tucson; October 15, 1957.

Paynes Livestock Auction, Tucson; October 15, 1957.

Willcox Livestock Commission Company, formerly Willcox Livestock Auction, Willcox; October 15, 1957.

Yuma Valley Livestock Auction Corp., Yuma; October 14, 1957.

ARKANSAS

Scott County Livestock Auction, Waldron; November 6, 1957.

IOWA

Westra Sales Co., Orange City; November 5, 1957.

KANSAS

Koenig Sale Barn, Manhattan; October 25, 1957.

Chandler Sales Company, Smith Center; October 23, 1957.

Stockton Livestock Commission Co., Stockton; October 22, 1957.

Done at Washington, D. C., this 12th day of December 1957.

[SEAL] JOHN C. PIERCE, Jr.,
Acting Director, Livestock Division,
Agricultural Marketing Service.

[F. R. Doc. 57-10408; Filed, Dec. 17, 1957; 8:45 a. m.]

Office of the Secretary

KENTUCKY

DESIGNATION OF AREA FOR PRODUCTION EMERGENCY LOANS

For the purpose of making production emergency loans pursuant to section 2 (a) of Public Law 38, 81st Congress (12 U. S. C. 1148a-2 (a), as amended, it has been determined that in the following counties in the State of Kentucky a production disaster has caused a need for agricultural credit not readily available from commercial banks, cooperative lending agencies, or other responsible sources.

KENTUCKY

Christian.	Trigg.
Lyon.	

Pursuant to the authority set forth above, production emergency loans will not be made in the above-named counties after December 31, 1958, except to applicants who previously received such assistance and who can qualify under established policies and procedures.

Done at Washington, D. C., this 13th day of December 1957.

[SEAL] TRUE D. MORSE,
Acting Secretary.

[F. R. Doc. 57-10436; Filed, Dec. 17, 1957; 8:50 a. m.]

MISSISSIPPI

DESIGNATION OF AREA FOR PRODUCTION EMERGENCY LOANS; CORRECTION

In the order of the Acting Secretary covering the above subject and dated December 3, 1957 (22 F. R. 9756), the word "Mississippi" is hereby substituted for the word "Pennsylvania" in the body of the order.

Done at Washington, D. C., this 12th day of December 1957.

[SEAL] TRUE D. MORSE,
Acting Secretary.

[F. R. Doc. 57-10409; Filed, Dec. 17, 1957; 8:45 a. m.]

ADMINISTRATOR, AGRICULTURAL RESEARCH SERVICE

DELEGATION OF AUTHORITY TO NEGOTIATE CONTRACTS IN THE ADMINISTRATION OF THE SCREW-WORM ERADICATION PROGRAM

Pursuant to the authority vested in the Secretary of Agriculture by the Administrator, General Services Administration, under date of November 15, 1957 (22 F. R. 9301), authority is delegated to the Administrator, Agricultural Research Service, with authority to redelegate to the Director, Administrative Services Division, to negotiate, without advertising, under sections 302 (c) (4) and 302 (c) (9) of the Federal Property and Administrative Services Act of 1949 (63 Stat. 377), contracts required by the Department of Agriculture in the administration of the programs for screw-worm eradication for the period ending December 31, 1958.

The authority hereby delegated shall be exercised in accordance with the requirements of the above-titled act, particularly sections 304, 305 and 307 and the policies, procedures and controls prescribed by the General Services Administration.

Done at Washington, D. C., this 12th day of December 1957.

[SEAL] E. T. BENSON,
Secretary.

[F. R. Doc. 57-10410; Filed, Dec. 17, 1957; 8:45 a. m.]

ATOMIC ENERGY COMMISSION

[Docket No. 50-70]

GENERAL ELECTRIC CO.

ORDER FOR HEARING

The following order has been issued by the Hearing Examiner in the matter of General Electric Company, Docket No. 50-70.

The Hearing Examiner having under consideration the portion of notice of hearing issued by the Commission on December 5, 1957, in this proceeding respecting the time and place of the hearing herein;

It is ordered, This 16th day of December 1957, that the hearing shall commence on January 17, 1958, at 10 o'clock a. m. in Hearing Room C, Interstate Commerce Commission Building, 12th and Constitution Avenue NW., Washington, D. C.

Dated at Washington, D. C., this 16th day of December 1957.

ATOMIC ENERGY COMMISSION,
WOODFORD B. MCCOOL,
Secretary.

[F. R. Doc. 57-10473; Filed, Dec. 17, 1957; 9:40 a. m.]

FEDERAL COMMUNICATIONS COMMISSION

[Docket Nos. 12170, 12171; FCC 57M-1246]

WESTBROOK BROADCASTING CO., INC., AND SHERWOOD J. TARLOW

ORDER CONTINUING HEARING

In re applications of Westbrook Broadcasting Co., Inc., Westbrook, Maine, Docket No. 12170, File No. BP-10911; Sherwood J. Tarlow, Saco, Maine, Docket No. 12171, File No. BP-11080; for construction permits.

The Hearing Examiner having under consideration the necessity of continuing the hearing;

It appearing that the hearing is now scheduled to commence on December 19, 1957, but that a conflict occurs in the Examiner's own schedule;

It is ordered, This 11th day of December 1957, on the Hearing Examiner's own motion, that the hearing now scheduled for December 19, 1957, is continued to January 6, 1958.

Released: December 12, 1957.

FEDERAL COMMUNICATIONS COMMISSION,
[SEAL] MARY JANE MORRIS,
Secretary.

[F. R. Doc. 57-10431; Filed, Dec. 17, 1957; 8:49 a. m.]

[Docket No. 12231; FCC 57M-1245]

GREYLOCK BROADCASTING CO. (WBRK)

ORDER FOLLOWING FIRST PRE-HEARING CONFERENCE (CONTINUING HEARING)

In re application of Greylock Broadcasting Company (WBRK), Pittsfield, Massachusetts, Docket No. 12231, File No. BP-11385; for construction permit.

1. Pursuant to an appropriate order of the Commission, the pre-hearing conference in the above-entitled proceeding was held December 9, 1957, at which the applicant, Greylock Broadcasting Company (WBRK), WENT Broadcasting Corporation and the Chief, Broadcast Bureau, Federal Communications Commission, were represented by counsel and Rensselaer Polytechnic Institute (WHAZ) was represented by its chief engineer. Rensselaer Polytechnic Institute, at the time of the pre-hearing conference, had not filed an appearance as required by § 1.387 of the Commission's rules.

2. In this proceeding, Greylock Broadcasting Company requests a construction permit to change the transmitter location and to make changes in the antenna system of Station WBRK, Pittsfield, Massachusetts, 1340 kc, 250 watts, unlimited

time. In the Commission order of October 30, 1957, designating the above application for hearing, the Commission found the applicant to be legally, technically, financially and otherwise qualified to operate the proposed station, except as may appear from the issues, and designated the application for hearing on the following issues:

1. To determine the areas and populations which may be expected to gain or lose primary service from the operation of Station WBRK as proposed, and the availability of other primary service to such areas and populations.

2. To determine whether the proposed operation would cause interference to Stations WENT, Gloversville, New York and WHAZ, Troy, New York, or any other existing standard broadcast stations, and if so, the nature and extent thereof, the areas and populations affected thereby, and the availability of other primary service to such areas and populations.

3. To determine whether the antenna system proposed by Greylock Broadcasting Company would constitute a hazard to air navigation.

4. To determine whether, in the light of the evidence adduced pursuant to the foregoing issues, a grant of the above-captioned application would be in the public interest.

3. At the pre-hearing conference, counsel for the Chief, Broadcast Bureau stated that the Commission had received formal notification from the appropriate authorities to the effect that the antenna system proposed by the applicant would not constitute a hazard to air navigation. Such finding by the appropriate authority will resolve Issue 3 in a manner favorable to the applicant.

4. At the hearing conference, it was stated that measurements have been taken which, upon preliminary study, indicate that the proposed operation will not cause objectionable interference to Station WENT, Gloversville, New York, or Station WHAZ, Troy, New York, or to any other existing or proposed station. It was agreed at the pre-hearing conference that the applicant would prepare engineering exhibits to meet Issues 1 and 2, which exhibits would be served upon all the parties to this proceeding on or before Wednesday, December 18, 1957.

5. All parties, their counsel, and consulting engineers may, if they so desire, hold informal conferences to discuss and clarify any matter in issue in order that the position of each party is made known to the others and correct factual data will be reflected in the exhibits and evidence to be offered at the hearing.

6. It was also agreed that if any party to the proceeding questioned either the accuracy, adequacy or completeness of the measurements, the interpretation thereof, or the conclusions as to the presence or absence of objectionable interference to any existing or proposed stations, or desires to present evidence on any matter in issue, such party will make known that fact by a formal pleading filed with the Commission on or before the close of business on January 8, 1958, and upon the receipt of such pleading, the Hearing Examiner will call a further pre-hearing conference for the purpose of determining (a) the desirability of calling witnesses in support of the applicant's affirmative case, (b) the preparation of rebuttal exhibits, or (c) the calling of rebuttal engineering witnesses. It was also agreed that in the absence of such request for a further pre-hearing conference, the written affirmative case of the applicant may be offered in evidence without the necessity of the applicant calling a witness to offer in evidence the exhibits exchanged on December 18, 1957. It was also agreed that the evidentiary hearing presently scheduled to begin on January 8, 1958 will be held on January 20, 1958.

It is ordered, This the 10th day of December 1957, that pursuant to the agreements reached at the pre-hearing conference summarized in the preceding paragraphs, the applicant need not prepare an exhibit in response to Issue 3 and that the applicant will prepare and exchange engineering exhibits necessary to respond to Issues 1 and 2 on or before Wednesday, December 18, 1957;

It is further ordered, That in the event any party to the proceeding desires a further pre-hearing conference in order to discuss any matter in issue, including but not limited to those mentioned in paragraph 6 hereof, such party will make known such fact by a pleading served upon all parties to the proceeding on or before January 8, 1958, and in the absence of a request for further pre-hearing conference, it shall be assumed that the parties do not question the adequacy or the accuracy of the engineering exhibits exchanged by the applicant on December 18, 1957;

It is further ordered, That the evidentiary hearing presently scheduled to begin on January 8, 1958, is continued to Monday, January 20, 1958, beginning at 10:00 a. m., in the offices of the Commission, Washington, D. C.

Released: December 12, 1957.

FEDERAL COMMUNICATIONS
COMMISSION,
[SEAL] MARY JANE MORRIS,
Secretary.

[F. R. Doc. 57-10432; Filed, Dec. 17, 1957; 8:49 a. m.]

[Docket No. 11934; FCC 57M-1244]

TEXAS TECHNOLOGICAL COLLEGE

ORDER GOVERNING COURSE OF HEARING

In re application of Texas Technological College, Lubbock, Texas, Docket No. 11934, File No. BPCT-2183; for construction permit for a new television broadcast station.

1. Pursuant to the provisions of § 1.813 of the rules of the Commission and in accordance with notice duly given, a pre-hearing conference in the above-entitled matter was held on December 9, 1957, looking toward reopening the record for trial of the issues designated by the Commission in its order released December 2, 1957 (FCC 57-1296).

2. Agreements were reached among the parties and were stated on the record as reflected in the transcript which is incorporated herein by reference. Such agreements are found to be acceptable and are approved by the Hearing Examiner and the course of the hearing shall be governed by the procedure agreed upon.

Accordingly, it is ordered, This 10th day of December 1957, that the foregoing agreements shall govern the course of the proceeding, unless modified by the Hearing Examiner for cause or by the Commission upon review of the Hearing Examiner's ruling; and that the evidentiary hearing herein be and is hereby scheduled for December 19, 1957, at 9:00 a. m., in Washington, D. C.

Released: December 11, 1957.

FEDERAL COMMUNICATIONS
COMMISSION,
[SEAL] MARY JANE MORRIS,
Secretary.

[F. R. Doc. 57-10433; Filed, Dec. 17, 1957; 8:49 a. m.]

FEDERAL RESERVE SYSTEM

BRENTON COMPANIES

ORDER GRANTING APPLICATION FOR ACQUISITION OF VOTING SHARES OF PALO ALTO COUNTY STATE BANK

In the matter of the application of Brenton Companies for approval of acquisition of voting shares of Palo Alto County State Bank, Emmetsburg, Iowa.

The above matter having come before the Board on the application of Brenton Companies, Des Moines, Iowa, filed pursuant to the provisions of section 3 (a) (2) of the Bank Holding Company Act of 1956, for prior approval of acquisition by Brenton Companies of direct ownership of 13 of the 1,500 outstanding shares of the Palo Alto County State Bank, and it appearing after due consideration thereof in the light of the factors enumerated in section 3 (c) of the Bank Holding Company Act of 1956 that such application should be granted,

It is hereby ordered, That the said application be and hereby is granted and the acquisition by Brenton Companies of direct ownership of 13 of the 1,500 outstanding shares of capital stock of Palo Alto County State Bank, Emmetsburg, Iowa, is hereby approved, provided that such acquisition is completed within three months from the date hereof.

Dated: December 10, 1957.

By order of the Board of Governors.

[SEAL] S. R. CARPENTER,
Secretary.

[F. R. Doc. 57-10416; Filed, Dec. 17, 1957; 8:46 a. m.]

FEDERAL POWER COMMISSION

[Docket No. G-13573]

HOPE NATURAL GAS CO.

NOTICE OF APPLICATION AND DATE OF HEARING

DECEMBER 12, 1957.

Take notice that on October 24, 1957, Hope Natural Gas Company (Applicant), a West Virginia corporation having its principal place of business in Clarksburg, West Virginia, filed in Docket No. G-13573 an application, pursuant to section 7 (b) of the Natural Gas Act, for permission to abandon natural gas service to Pond Fork Oil and Gas Company (Pond Fork) from Applicant's well No. 9814 located in the Crook District, Boone County, West Virginia, all as more fully set forth in the application which is on file with the Commission and open to public inspection.

Applicant states that the supply of gas from the aforementioned well has declined to a point where continued production therefrom is no longer economically feasible, and that Applicant and Pond Fork have entered into an agreement cancelling the contract covering the subject sale.

This matter is one that should be disposed of as promptly as possible under the applicable rules and regulations and to that end:

Take further notice that, pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Power Commission by sections 7 and 15 of the Natural Gas Act, and the Commission's rules of practice and procedure, a hearing will be held on January 21, 1958, at 9:30 a. m., e. s. t., in a Hearing Room of the Federal Power Commission, 441 G Street NW., Washington, D. C., concerning the matters involved in and the issues presented by such application: *Provided, however*, That the Commission may, after a non-contested hearing, dispose of the proceedings pursuant to the provisions of § 1.30 (c) (1) of the Commission's rules of practice and procedure. Under the procedure herein provided for, unless otherwise advised, it will be unnecessary for Applicant to appear or be represented at the hearing.

Protests or petitions to intervene may be filed with the Federal Power Commission, Washington 25, D. C., in accordance with the rules of practice and procedure (18 CFR 1.8 or 1.10) on or before January 10, 1958. Failure of any party to appear at and participate in the hearing shall be construed as waiver of and concurrence in omission herein of the intermediate decision procedure in cases where a request therefor is made.

[SEAL] JOSEPH H. GUTRIDE,
Secretary.

[F. R. Doc. 57-10424; Filed, Dec. 17, 1957; 8:48 a. m.]

[Docket No. G-3664 etc.]

EQUITABLE LIFE ASSURANCE SOCIETY OF THE UNITED STATES AND HOUSTON NATURAL GAS PRODUCTION CO.

NOTICE SETTING DATE FOR CONSOLIDATED HEARING

DECEMBER 12, 1957.

In the matters of The Equitable Life Assurance Society of the United States, Docket Nos. G-3664, G-9045; and Houston Natural Gas Production Company,[1] Docket No. G-9046.

By notice dated January 18, 1956, the above-entitled matters were set for hearing to commence on February 14, 1956. Thereafter, on the request of the then Applicant, such hearing was postponed to commence at a time and place to be thereinafter fixed.

Due notice of the applications filed herein was published in the FEDERAL REGISTER on January 24, 1956 (21 F. R. 550).

Take notice that, pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Power Commission by sections 7 and 15 of the Natural Gas Act, and the Commission's rules and regulations thereunder, a hearing will be held on January 20, 1958, at 10:00 a. m., e. s. t., in a Hearing Room of the Federal Power Commission, 441 G Street NW., Washington, D. C. concerning the matters involved in and the issues presented by the applications in Docket Nos. G-3664, G-9045 and G-9046.

[SEAL] JOSEPH H. GUTRIDE,
Secretary.

[F. R. Doc. 57-10423; Filed, Dec. 17, 1957; 8:47 a. m.]

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[1] Successors in interest and substitute applicants in lieu of McCarthy Oil & Gas Corporation.

[Docket No. G-13551]

NORTHERN NATURAL GAS CO.

NOTICE OF APPLICATION AND DATE OF HEARING

DECEMBER 12, 1957.

Take notice that Northern Natural Gas Company (Applicant), a Delaware corporation with its principal place of business at Omaha, Nebraska, filed an application on October 18, 1957, for authorization pursuant to section 7 (b) of the Natural Gas Act to (1) abandon and remove two branch pipelines and a measuring and regulating station, the pipelines consisting of 4.8 miles of 2-inch and 4.8 miles of 3-inch, and (2) service being rendered to Kansas Power and Light Company by the sale of gas thereto for resale in Greensburg, Kansas, subject to the jurisdiction of the Commission, as more fully stated in the application filed with the Commission, and open for public inspection.

The application recites that the service proposed to be abandoned is being discontinued pursuant to the request of Kansas Power and Light Company, which company represents that the service of natural gas will continue from its own intrastate pipeline system.

This matter is one that should be disposed of under the applicable rules and regulations and to that end:

Take further notice that, pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Power Commission by sections 7 and 15 of the Natural Gas Act, and the Commission's rules of practice and procedure, a hearing will be held on January 30, 1958, at 9:30 a. m., e. s. t., in a hearing room of the Federal Power Commission, 441 G Street NW., Washington, D. C., concerning the matters involved in and the issues presented by such application: *Provided, however*, That the Commission may, after a noncontested hearing, dispose of the proceedings pursuant to the provisions of § 1.30 (c) (1) of the Commission's rules of practice and procedure. Under the procedure herein provided for, unless otherwise advised, it will be unnecessary for Applicant to appear or be represented at the hearing.

Protests or petitions to intervene may be filed with the Federal Power Commission, Washington 25, D. C., in accordance with the rules of practice and procedure (18 CFR 1.8 or 1.10) on or before January 27, 1958. Failure of any party to appear at and participate in the hearing shall be construed as waiver of and concurrence in omission herein of the intermediate decision procedure in cases where a request therefor is made.

[SEAL] JOSEPH H. GUTRIDE,
Secretary.

[F. R. Doc. 57-10425; Filed, Dec. 17, 1957; 8:48 a. m.]

[Docket No. G-13845]

MIDWEST OIL CORP. ET AL.

ORDER FOR HEARING AND SUSPENDING PROPOSED CHANGE IN RATES

DECEMBER 12, 1957.

Midwest Oil Corporation (Operator) et al. (Midwest), on November 12, 1957, tendered for filing a proposed change in its presently effective rate schedule for the sale of natural gas subject to the jurisdiction of the Commission. The proposed change, which constitutes an increased rate and charge, is contained in the following designated filing:

Description: Notice of change, dated November 7, 1957.

Purchaser: El Paso Natural Gas Company.

Rate schedule designated: Supplement No. 1 to Midwest's Rate Schedule No. 12.

Effective date: January 1, 1957 (effective date is the effective date proposed by Midwest).

In support of the proposed rate increase, Midwest states, that the pertinent pricing provisions of the contract were arrived at by arm's-length bargaining, that the increase is necessary to provide funds needed for additional exploration and development, and that the proposed rate is to compensate Midwest for the lower initial rate.

The increased rate and charge so proposed has not been shown to be justified, and may be unjust, unreasonable, unduly discriminatory, or preferential, or otherwise unlawful.

The Commission finds: It is necessary and proper in the public interest and to aid in the enforcement of the provisions of the Natural Gas Act that the Commission enter upon a hearing concerning the lawfulness of the said proposed change, and, that the above-designated supplement be suspended and the use thereof deferred as hereinafter ordered.

The Commission orders:

(A) Pursuant to the authority of the Natural Gas Act, particularly sections 4 and 15 thereof, the Commission's rules of practice and procedure, and the regulations under the Natural Gas Act (18 CFR Ch. I), a public hearing be held upon a date to be fixed by notice from the Secretary concerning the lawfulness of the proposed increased rate and charge.

(B) Pending such hearing and decision thereon, said supplement be and it is hereby suspended and the use thereof deferred until June 1, 1958, and until further time as it is made effective in the manner prescribed by the Natural Gas Act.

(C) Neither the supplement hereby suspended, nor the rate schedule sought to be altered thereby, shall be changed until this proceeding has been disposed of or until the period of suspension has expired, unless otherwise ordered by the Commission.

(D) Interested State commissions may participate as provided by §§ 1.8 and 1.37 (f) of the Commission's rules of practice and procedure (18 CFR 1.8 and 1.37 (f)).

By the Commission (Commissioners Digby and Kline dissenting).

[SEAL] JOSEPH H. GUTRIDE,
Secretary.

[F. R. Doc. 57-10426; Filed, Dec. 17, 1957; 8:48 a. m.]

[Docket No. G-13891]

PENNSYLVANIA GAS CO.

ORDER PROVIDING FOR HEARING AND SUSPENDING PROPOSED TARIFF SHEET

DECEMBER 12, 1957.

Pennsylvania Gas Company (Pennsylvania Gas), on November 12, 1957, tendered for filing First Revised Sheet No. 4 to its FPC Gas Tariff, Original Volume No. 1. Said tariff filing is intended to be made effective January 1, 1958, and proposes an annual increase in rates to its single resale customer, North East Heat and Light Company (North East) of $9,276 or 10 percent based on sales for the year ended September 1957, as adjusted.

The proposed change by Pennsylvania will (1) increase the Rate Schedule CA-1 rate to a straight volumetric charge of 55¢ per Mcf in lieu of the present block-type rate; (2) eliminate the prompt payment discounts, and (3) modify the provision regarding curtailment of service to permit reductions in deliveries to North East for resale to industrial or commercial customers when Pennsylvania Gas reduces deliveries to similar customers in its distribution area.

In support of its proposed increase in rates, Pennsylvania has submitted cost data consisting of actual costs for the 12-month period ended September 30, 1957, adjusted to reflect: (1) a rate of return of 6.6 percent together with associated Federal income taxes; (2) increased cost of purchased gas; and (3) increased storage and labor costs. The total system claimed cost of service applicable to production, storage, and transmission is $10,402,962, which is allocated on a volumetric basis (0.99 percent or $102,479) to jurisdictional business (sales to North East). Estimated revenue under the proposed rate totals $102,238, or $241 less than allocated costs.

It appears that Pennsylvania Gas proposed rate increase is based substantially on a rate of return of 6.6 percent and increased operating expenses due to wage increases and purchased gas costs. Since the contingently effective rate of suppliers[1] under which Pennsylvania Gas obtains 82 percent of its purchased gas may not be allowed in their entirety, Pennsylvania Gas claimed cost of operations is conjectural. Pennsylvania Gas also claims that it is earning a rate of return of only 3.6 percent on jurisdictional business (0.99 percent of total) under the presently effective rates, however, data submitted by Pennsylvania Gas show it is earning an overall rate of return of about 6.9 percent.

The increased rates and charges provided in said tariff sheet, as tendered on November 12, 1957, have not been shown to be justified, and may be unjust, unreasonable, unduly discriminatory, or preferential, or otherwise unlawful.

The Commission finds: It is necessary and proper in the public interest, and to aid in the enforcement of the provisions of the Natural Gas Act, that the Commission enter upon a hearing concerning the lawfulness of the rates, charges, classifications, and services contained in Pennsylvania Gas' FPC Gas Tariff, Original Volume No. 1, as proposed to be amended by First Revised Sheet No. 4, tendered for filing on November 12, 1957; and that said revised tariff sheet be suspended and the use thereof deferred as hereinafter ordered.

The Commission orders:

(A) Pursuant to the authority of the Natural Gas Act, particularly sections 4 and 15 thereof, the Commission's rules of practice and procedure, and the regulations under the Natural Gas Act (18 CFR Ch. I), a public hearing be held upon a date to be fixed by notice from the Secretary concerning the lawfulness of the rates, charges, classifications, and services contained in Pennsylvania Gas' FPC Gas Tariff, Original Volume No. 1, as proposed to be amended by Sheet No. 4 tendered for filing on November 12, 1957.

(B) Pending such hearing and decision thereon, Pennsylvania Gas' First Revised Sheet No. 4 to its FPC Gas Tariff, Original Volume No. 1, is hereby suspended and the use thereof deferred until June 1, 1958, and until such further time as it may be made effective in the manner prescribed by the Natural Gas Act.

(C) Interested State commissions may participate as provided by §§ 1.8 and 1.37 (f) of the Commission's rules of practice and procedure (18 CFR 1.8 and 1.37 (f)).

By the Commission.

[SEAL] JOSEPH H. GUTRIDE,
Secretary.

[F. R. Doc. 57-10427; Filed, Dec. 17, 1957; 8:48 a. m.]

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[1] Tennessee Gas Transmission Company, United Natural Gas Company (affiliated with Pennsylvania Gas), Iroquois Gas Corporation and an independent producer.

[Docket No. E-6791]

PACIFIC POWER & LIGHT CO.

NOTICE OF APPLICATION

DECEMBER 12, 1957.

Take notice that on December 10, 1957, an application was filed with the Federal Power Commission pursuant to section 204 of the Federal Power Act by Pacific Power & Light Company ("Applicant"), a corporation organized under the laws of the State of Maine and doing business in the States of Oregon, Washington, Wyoming, Montana and Idaho with its principal business office at Portland, Oregon, seeking an order authorizing the issuance of $15,000,000 in principal amount of First Mortgage Bonds and the issuance of 100,000 shares of Serial Preferred Stock of the par value of $100 per share. The aforesaid Bonds -- percent Series will mature on January 1, 1988, and will be issued as a new series of Applicant's First Mortgage Bonds under and pursuant to Applicant's presently existing Mortgage and Deed of Trust, dated as of July 1, 1947, to Guaranty Trust Company of New York and Oliver R. Brooks, as Trustees, as heretofore supplemented by eight indentures supplemental thereto, and as it is to be further supplemented by a Ninth Supplemental Indenture thereto, to be dated as of January 1, 1958, a copy of the proposed form of which is attached to this application as Exhibit D-10. The aforesaid -- percent Serial Preferred Cumulative Stock proposed to be issued is a new series of Applicant's presently authorized serial preferred stock under and pursuant to the provisions of Applicant's By-Laws attached to this application as Exhibit B-1. Applicant proposes to sell the aforesaid Bonds and Preferred Stock under competitive bidding and the interest rate of said Bonds and the dividend rate of the Preferred Stock are also to be fixed by competitive bidding. The holders of the new issue of Preferred Stock will be entitled to one vote for each share held by them, together with additional voting privileges during any periods when preferred stock dividends may be in arrears. Applicant proposes to use the proceeds from the sale of the aforesaid bonds and preferred stock for the purpose of carrying forward its 1958 construction program and of repaying all notes outstanding at the time of the sale of the bonds and preferred stock under a Credit Agreement, dated as of April 18, 1956, between Applicant and certain banks.

Any person desiring to be heard or to make any protest with reference to said application should on or before the 2d day of January 1958, file with the Federal Power Commission, Washington 25, D. C., petitions or protests in accordance with the requirements of the Commission's rules of practice and procedure (18 CFR 1.8 or 1.10). The application is on file and available for public inspection.

[SEAL] JOSEPH H. GUTRIDE,
Secretary.

[F. R. Doc. 57-10428; Filed, Dec. 17, 1957; 8:48 a. m.]

SECURITIES AND EXCHANGE COMMISSION

[File No. 70-3647]

MONTAUP ELECTRIC CO.

NOTICE OF FILING OF DECLARATION REGARDING ISSUANCE OF SHORT-TERM NOTES TO BANK

DECEMBER 11, 1957.

Notice is hereby given that Montaup Electric Company ("Montaup"), a public-utility company and an indirect subsidiary of Eastern Utilities Associates, a registered holding company, has filed a declaration with this Commission pursuant to the Public Utility Holding Company Act of 1935 ("act"), designating sections 6 (a) and 7 of the act and Rules U-50 (a) (2) and U-42 (b) (2) promulgated thereunder as applicable to the proposed transactions.

All interested persons are referred to said declaration which is on file in the offices of the Commission for a statement of the proposed transactions which are summarized as follows:

Montaup proposes to borrow periodically from The First National Bank of Boston, prior to December 31, 1958, amounts not to exceed an aggregate of $12,000,000 outstanding at any one time. The borrowings will be evidenced by unsecured promissory notes of 90 days duration or less, maturing not later than December 31, 1958. The notes will be prepayable in whole or in part at any time without penalty, and will bear interest from the date of issue at an annual rate of ¼ of 1 percent above the prime rate prevailing at the time of each borrowing.

Montaup is engaged in a construction program estimated to cost in excess of $20,000,000. The proceeds from the proposed bank borrowings will be used to pay outstanding short-term bank indebtedness, expected to total $1,600,000 on December 30, 1957, and to provide funds to finance said construction program in 1958. Montaup proposes during 1958 to issue and sell additional debenture bonds and common stock to its owner companies aggregating $6,500,000. The proceeds from such financing will be used to pay off a portion of the then outstanding bank borrowings, and thereafter, the maximum amount of short-term indebtedness which may be outstanding hereunder will be reduced by the amount of the proceeds from the permanent financing. Montaup estimates that a total of $8,800,000 of notes payable to banks will be outstanding when they become due at December 31, 1958. It will be necessary to raise additional funds in some form to meet this maturity.

The declaration states that no State or Federal commission, other than this Commission, has jurisdiction over the proposed transactions. The only fees and expenses to be incurred by Montaup in connection with the above transactions are those of counsel for the company. A statement of the estimated fees and expenses of counsel is to be supplied by amendment.

Notice is further given that any interested person may, not later than December 26, 1957, at 5:30 p. m., request the Commission in writing that a hearing be held on such matters, stating the nature of his interest, the reasons for such request, and the issues of fact or law raised by said filing which he desires to controvert, or he may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed: Secretary, Securities and Exchange Commission, Washington 25, D. C. At any time after said date, the declaration, as filed or as it may hereafter be amended, may be permitted to become effective as provided in Rule U-23 of the rules and regulations promulgated under the act, or the Commission may grant exemption from its rules as provided in Rules U-20 (a) and U-100 or take such other action as it may deem appropriate.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 57-10420; Filed, Dec. 17, 1957; 8:47 a. m.]

[File No. 24NY-3535]

AMERICAN DEVELOPMENT CORP.

ORDER TEMPORARILY SUSPENDING EXEMPTION, STATEMENT OF REASONS THEREFOR, AND NOTICE OF OPPORTUNITY FOR HEARING

DECEMBER 11, 1957.

I. American Development Corporation, a Delaware corporation, 317-325 South State Street, Dover, Delaware, filed with the Commission on November 16, 1953, a notification on Form 1-A and an offering circular and amendments thereto, relating to a proposed public offering of 200,000 shares of 10¢ par value common stock at $1.50 a share, or $300,000 in the aggregate, for the purpose of obtaining an exemption from the registration requirements of the Securities Act of 1933, as amended, pursuant to the provisions of section 3 (b) thereof and Regulation A, promulgated thereunder.

II. The Commission has reasonable cause to believe:

A. That the terms and conditions of Regulation A have not been complied with in that the issuer has failed to file Form 2-A Reports of Sales, as required by Rule 224 of Regulation A, and has ignored requests by the Commission's staff for such reports.

B. That the offering circular contains untrue statements of material facts and omits to state material facts necessary in order to make the statements made, in the light of the circumstances under which they are made, not misleading, concerning, among other things:

1. The interest in and assignment of oil leases in North Carolina.

2. The arrangements in connection with the exchange of issuer's interest in a plastic "Salad Globe" for interest in a plastic "Key Kase" and manufacture thereof.

3. The option for use of a sulfur solvent extraction process and option on surface sulfur ore property in Southern California.

4. The designation of Anthony Easton as general manager of the Plastics Division of the issuer without his consent.

5. The designation of Jack B. Davis as sulfur mining advisor of issuer without his consent.

6. The designation of E. T. Burton as a director of the issuer without his consent.

7. The failure to indicate that the underwriter, I. J. Schenin & Co., had withdrawn its consent to being named as underwriter on or about November 19, 1954.

C. The offering would and did operate as a fraud and deceit upon purchasers.

III. *It is ordered,* Pursuant to Rule 223 (a) of the general rules and regulations under the Securities Act of 1933, as amended, that the exemption under Regulation A be, and it hereby is, temporarily suspended.

Notice is hereby given that any person having any interest in the matter may file with the Secretary of the Commission a written request for a hearing; that within 20 days after receipt of such request, the Commission will, or at any time upon its own motion may, set the matter down for hearing at a place to be designated by the Commission for the purpose of determining whether this order of suspension should be vacated or made permanent, without prejudice, however, to the consideration and presentation of additional matters at the hearing; and that notice of the time and place for said hearing will be promptly given by the Commission.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 57-10421; Filed, Dec. 17, 1957; 8:47 a. m.]

[File No. 24NY-4214]

HOWARD HOYT

ORDER TEMPORARILY SUSPENDING EXEMPTION, STATEMENT OF REASONS THEREFOR, AND NOTICE OF OPPORTUNITY FOR HEARING

DECEMBER 12, 1957.

In the matter of Howard Hoyt as "The Strip for Action Company", (File No. 24 NY-4214).

I. Howard Hoyt as "The Strip for Action Company", a company formed to produce a theatrical venture, with principal offices located at 531 East 72 Street, New York, N. Y., filed with the Commission on February 1, 1956, a notification on Form 1-A and an offering circular, a proposed pre-formation limited partnership agreement and supplemental material, relating to a proposed offering of pre-formation limited partnership interests not to exceed $300,000, including a possible 20 percent overcall, for the purpose of obtaining an exemption from the registration requirements of the Securities Act of 1933, as amended, pursuant to the provisions of section 3 (b) thereof and Regulation A promulgated thereunder; and

II. The Commission has reasonable cause to believe that:

A. The terms and conditions of Regulation A have not been complied with in that:

1. The issuer has failed to file on Form 2-A reports of sales as required by Regulation A and has ignored requests by the Commission's staff for such reports; and

2. The issuer has failed to disclose in Item 1 of the notification all the jurisdictions in which the issuer's securities were to be offered and sold;

B. The offering circular filed with the Commission contains untrue statements of material facts and omits to state material facts in order to make the statements made, in light of the circumstances under which they are made, not misleading, particularly in that the company was formed on the basis of contributions aggregating about $120,000 contrary to the statements in the offering circular and provisions of the proposed limited partnership agreement that the partnership would not be formed until aggregate limited contributions equal to the estimated production requirements have been made and contrary to the memorandum of agreement that the contributions would be returned and the partnership would not be formed if $250,000 were not raised within four months of the date thereof.

III. *It is ordered*, Pursuant to Rule 223 (a) of the general rules and regulations under the Securities Act of 1933, as amended, that the exemption under Regulation A be, and it hereby is, temporarily suspended.

Notice is hereby given that any person having any interest in the matter may file with the Secretary of the Commission a written request for a hearing; that within 20 days after receipt of such request, the Commission will, or, at any time upon its own motion may, set the matter down for hearing at a place to be designated by the Commission for the purpose of determining whether this order of suspension should be vacated or made permanent, without prejudice, however, to the consideration and presentation of additional matters at the hearing; and that notice of the time and place of said hearing will be promptly given by the Commission.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 57-10422; Filed, Dec. 17, 1957; 8:47 a. m.]

INTERSTATE COMMERCE COMMISSION

[Notice No. 4]

Applications for Conversion by Motor Contract Carriers

DECEMBER 13, 1957.

The following proceedings are governed by the Interstate Commerce Commission's special rules of practice, published in the FEDERAL REGISTER on November 13, 1957, Volume 22, FEDERAL REGISTER, page 9015, concerning notice of proceedings upon application of a holder of motor contract carrier authority, under section 212 (c) of the Interstate Commerce Act, for the revocation of motor contract carrier authority issued on or before August 22, 1957, and the issuance in lieu thereof of a certificate of public convenience and necessity (49 CFR 1.242). A proceeding to determine the status of the carriers' operations has been instituted under section 212 (c).

Protests may be filed with the Commission within 30 days after the date notice of the proceedings is published in the FEDERAL REGISTER. If oral hearing is desired the protest must so indicate.

The authority set out in the pertinent permits upon which a determination is sought, has, in most instances, been summarized.

MOTOR CARRIERS OF PROPERTY

No. MC 1499 (Sub No. 2) filed November 5, 1957, BLUE VALLEY TRANSFER CO., 501 Cambridge Avenue, Kansas City, Mo. Applicant's attorney: Henry M. Shughart, 914 Commerce Building, Kansas City, Mo. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 1499, dated August 2, 1951.

Fencing, construction steel, angles, bars, joints, nails, and *similar iron and steel articles*, between Kansas City, Mo., and North Kansas City, Mo., and Kansas City, Kans., on the one hand, and, on the other, points in Missouri and Kansas.

Such iron and steel articles as are used on construction projects, from Kansas City, Mo., and Kansas City, Kans., to points in Nebraska.

No. MC 4923 (Sub No. 8) filed November 1, 1957, REEFER TRANSIT LINE, INC., 1415 West Pershing Road, Chicago 9, Ill. For authority to operate as a *common carrier*, of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 4923, dated January 27, 1944.

Petroleum products in containers, over irregular routes, from Bradford and Rouseville, Pa., to Chicago, Ill.

Iron and steel products, over irregular routes, from Martins Ferry, Ohio, and Wheeling, Benwood, Warwood, and Beach Bottom, W. Va., to Chicago, Ill., and St. Louis, Mo.

Tinplate, over irregular routes, from Canton and Toronto, Ohio, and Follansbee, W. Va., to Chicago, Ill.

Packing-house products, packing-house supplies, dressed poultry, and *dairy products*, over irregular routes, between Chicago, Ill., on the one hand, and, on the other, Kansas City, Kans., St. Louis and Kansas City, Mo., East St. Louis, Ill., Omaha, Nebr., and points in Iowa; from Chicago, Ill., to Jamestown, Buffalo, and New York, N. Y., Newark, N. J., Wheeling, W. Va., and points in West Virginia, within 25 miles of Wheeling, points in Ohio on and east of a line beginning at Lake Erie and extending along Ohio Highway 4 to Bucyrus, Ohio, thence along Ohio Highway 98 to Waldo, Ohio, and thence along U. S. Highway 25 to the Ohio-Kentucky State line, and those in Pennsylvania on and west of U. S. Highway 219.

Dressed poultry and *dairy products*, over irregular routes, from points in Iowa and Nebraska to Buffalo and New York, N. Y., Newark, N. J., and points in the above-described portions of Ohio and Pennsylvania.

No. MC 4923 (Sub No. 3), dated July 7, 1948.

Dairy products, as defined by the Commission, over irregular routes, from Rochester, Ind., to Baltimore, Md., Washington, D. C., and points in Pennsylvania, New Jersey and New York.

Equipment and *supplies* useful in meat packing houses on return.

No. MC 4923 (Sub No. 6), dated March 5, 1952.

Fresh meat, from Milwaukee, Wis., to Pittsburgh, Pa.

Cheese, from Rochester, Ind., to Wilmington, Del., and points in that part of Ohio on and east of U. S. Highway 21, from Cleveland, Ohio, to the Ohio-West Virginia State line, through Massillon, New Philadelphia, Newcomerstown, Cambridge, and Marietta, Ohio.

No. MC 4923 (Sub No. 7), dated December 12, 1952.

Lubricating oils and greases, in containers, from Bradford, Pa., to Benton Harbor, Mich., and *empty containers*, on return.

No. MC 6017 (Sub No. 1) filed October 24, 1957, BALSER TRUCK CO., 8332 Wilcox Avenue, Bell, Calif. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 6017, dated October 14, 1949.

Raw and manufactured chemicals, in containers, over a regular route, between Los Angeles, Calif., and Los Angeles Harbor, Calif.:

Service is authorized to and from the off-route points of Southgate and Long Beach, Calif. Service is not authorized to or from intermediate points.

No. MC 6999 (Sub No. 2) filed November 1, 1957, G. & G. LUMBER HAULAGE CO., INC., March Street, Port Newark 5, N. J. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 6999, dated April 12, 1949.

Wooden boxes, crates, shooks, building materials, and *lumber*, from Newark, N. J., to points and places in New Jersey, New York, Pennsylvania, and Connecticut.

Lumber, wooden boxes, and *box making equipment* and *materials*, between points and places in Essex and Union Counties, N. J., on the one hand, and, on the other, points and places in New York and Pennsylvania within 100 miles of Newark, N. J.

No. MC 9685 (Sub No. 58) filed November 5, 1957, THE EMERY TRANSPORTATION COMPANY, a Corporation, 7000 South Pulaski Road, Chicago 29, Ill. Applicant's attorney: Charles W. Singer, 1825 Jefferson Place NW., Washington 6, D. C. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 9685, dated November 14, 1951.

Such merchandise as is dealt in by wholesale and retail grocery business houses, subject to a "Keystone" restriction, over specified regular routes, between Nashville, Tenn., and Cincinnati, Ohio, serving the intermediate points of Bowling Green and Louisville, Ky.; between Nashville, Tenn., and Evansville, Ind., serving no intermediate points.

Glassware, subject to a "Keystone" restriction, over irregular routes, from Champaign and Springfield, Ill., to Cincinnati, Ohio; between Washington, Pa., and Cincinnati, Ohio; between Alton and Streator, Ill., and Louisville and Newport, Ky., on the one hand, and, on the other, points within the territory bounded by a line beginning at the Indiana-Illinois State line and extending along U. S. Highway 24 to Huntington, Ind., thence along U. S. Highway 224 to Van Wert, Ohio, thence along U. S. Highway 30 to Delphos, Ohio, thence along U. S. Highway 30N to Mansfield, Ohio, thence along U. S. Highway 30 to Massillon, Ohio, thence along U. S. Highway 21 to the Ohio-West Virginia State line, thence along the Ohio-West Virginia State line to the Ohio-Kentucky State line, thence along the Ohio-Kentucky State line to the Ohio-Indiana-Kentucky State lines, thence along the Indiana-Kentucky State line to the Kentucky-Indiana-Illinois State line and thence along the Indiana-Illinois State line to the point of beginning, including points on the indicated portions of the highways specified.

Glass containers, from Muncie, Lapel, and Winchester, Ind., to Chicago, Ill.; from Alton and Streator, Ill., and Dunkirk, Ind., to points in Wisconsin.

Glass containers and accessories therefor, from Winchester, Ind., to points in Iowa; from Muncie, Ind., to points in Iowa and Ohio, those in New York on and west of New York Highway 14, and those in Pennsylvania on and west of U. S. Highway 219.

Glassware and glass containers, from Winchester, Ind., and points within five miles of Winchester, to Lancaster, Ohio.

Glassware, and *such materials, supplies*, and *equipment*, as are used in the manufacture of glassware, between Zanesville, Ohio, Clarksburg and Wheeling, W. Va., and Washington, Pa.; between Zanesville, Ohio, on the one hand, and, on the other, points in Indiana, Kentucky, the Southern peninsula of Michigan, New York, Ohio, and Pennsylvania.

Glassware, not otherwise indexed by name, other than cut; *glass containers*, common or parts thereof, viz., bottles (except siphon bottles and bottles fitted with siphons); *jars and packing glasses*, not exceeding 5 gallons in capacity, with or without their equipment of caps, covers or stoppers; *caps, covers* or *tops* (other than display), for bottles, glassware, or jars, not otherwise indexed by name; and *paper shipping cartons*, from Winchester, Ind., and Lancaster, Ohio to St. Louis, Mo.; from South Connellsville, Pa., to St. Louis, Mo., Bay City, Mich., points in Illinois, Indiana, Ohio, those in Kentucky on the Ohio River and that part of Michigan south and west of a line beginning at Ludington, Mich., and extending along U. S. Highway 10 to Flint, Mich., thence along Michigan Highway 21 to Port Huron, Mich., including points on the indicated portions of the highways specified.

Glassware, glass containers, and *paper cartons* used in the packing and shipping of glassware and glass containers, from Lancaster, Ohio, and Winchester, Ind., and points within five miles of Winchester to points in that part of Kentucky on and north of U. S. Highway 60, and that part of Pennsylvania on and west of a line beginning at the Pennsylvania-West Virginia State line and extending along U. S. Highway 119 to junction U. S. Highway 219, and thence along U. S. Highway 219 to the Pennsylvania-New York State line; from Winchester, Ind., and points within five miles of Winchester to Alliance, Cincinnati, Columbus, Plain City, Baltimore, Bucyrus, Akron, Cleveland, and Dayton, Ohio, and Lawrenceburg, Ind.; from Lancaster, Ohio to points in Indiana.

Machinery, materials and *supplies* used in the manufacture, packing and shipping of glassware and glass containers, subject to a "Keystone" restriction, between Lancaster, Ohio, on the one hand, and, on the other Winchester, Ind., and points within five miles of Winchester.

Grease and *tallows*, in bulk, in tank vehicles equipped with heating coils, subject to a "Keystone" restriction, over irregular routes, from points in Indiana, Wisconsin, those in Iowa on and east of U. S. Highway 69, those in Michigan on and south of U. S. Highway 16, and those in the Cincinnati, Ohio, Commercial Zone: from points in Illinois, Indiana, and Kentucky, except Louisville, to St. Bernard, Ohio. Restriction: Said carrier shall not light nor keep lighted open-flame burners attached to any vehicle used in the aforesaid transportation, except and only when such vehicle is at rest and off the highway.

Cleansing compound, from Detroit, Mich., to Barrington, Ill.

Soap, soap powders, and *toilet articles*, from Jeffersonville, Ind., to Bloomington, Champaign, Chanute Field, Danville, Freeport, Peoria, Galesburg, Petersburg, Rockford, and Chicago, Ill., and Detroit, Flint, Grand Rapids, Lansing, Muskegon, Owosso, Port Huron, Saginaw, and Sturgis, Mich.

Soap, soap powders, lard substitutes, washing powders, and *vegetable compounds*, from Chicago, Ill., to points in La Porte, Starke, Pulaski, Fulton, Marshall, Saint Joseph, Elkhart, Kosciusko, Steuben, De Kalb, Lagrange, Carroll, White, Miami, Wabash, Huntington, Wells, Adams, Allen, Cass, Whitley, and Noble Counties, Ind. Service is not authorized on return trips to Chicago except for the transportation of rejected shipments of the above-specified commodities.

Soap, soap powders, cleaning and washing compounds, vegetable oil shortening, cooking oil, toilet preparations, glycerine, and *advertising material* and *premiums* when shipped in connection with such commodities, from Chicago, Ill., and Cincinnati, St. Bernard, and Sharonville, Ohio, to points in the Lower Peninsula of Michigan.

Oleomargarine, between Norwalk, Ohio, on the one hand, and, on the other, Detroit and Grand Rapids, Mich., Louisville, Bellevue, and Covington, Ky., Madison, Wis., and St. Louis, Mo.

Non-alcoholic beverages and *advertising matter* relative thereto, subject to a "Keystone" restriction, over irregular routes, from Maywood, Ill., to Louisville, Henderson, and Covington, Ky., and points in Indiana, Illinois, Ohio, and Michigan, and *empty beverage containers*, on return.

Carbonated beverages, from Maywood, Ill., to points in Iowa and Wisconsin, and *empty carbonated beverage containers*, on return.

Syrup for carbonated beverages, from Maywood, Ill., to points in Indiana, Iowa, Michigan, Ohio, Wisconsin, and to Louisville, Henderson, and Covington, Ky.

Returned, rejected or damaged shipments of carbonated beverages, advertising matter relative thereto, and *syrup* for carbonated beverages, from points in Indiana, Iowa, Michigan, Ohio, Wisconsin, and from Louisville, Henderson, and Covington, Ky., to Maywood, Ill.

Malt beverages and *empty malt beverage containers*, subject to a "Keystone" restriction, over irregular routes, between Chicago, Ill., on the one hand, and, on the other, points in Wisconsin.

Carbonated and malt beverages, from St. Louis, Mo., to Maywood, Ill.; from Maywood, Ill., to Cape Girardeau, Hannibal, and St. Louis, Mo., and *empty beverage containers*, on return.

Malt beverages, from Maywood, Ill., to Elkhart, Fort Wayne and Indianapolis, Ind., Burlington, Cedar Rapids, Davenport, Des Moines, Dubuque, and Waterloo, Iowa, Detroit Mich., and Cincinnati and Toledo, Ohio, and *empty malt beverage containers*, on return.

Such merchandise, other than malt beverages, as is dealt in by wholesale food business houses, and in connection therewith, *equipment, materials* and *supplies* used in the conduct of such business, subject to a "Keystone" restriction, between Chicago, Ill., on the one hand, and, on the other, points in Wisconsin.

Such merchandise as is dealt in by wholesale or retail food business houses, and in connection therewith, *equipment, materials* and *supplies* used in the conduct of such business, between Muscatine, Iowa, on the one hand, and, on the other, Louisville, Ky., and points in Illinois, Indiana, Michigan, Minnesota, Missouri, and Wisconsin; Between Barrington, Ill., on the one hand, and, on the other, Cincinnati, Ohio, Green Bay, Madison, Milwaukee, Onalaska, and Oshkosh, Wis., St. Louis, Mo., and Clinton, Iowa; between Chicago, Ill., on the one hand, and, on the other, points in Iowa.

Foodstuffs, raw and manufactured, between points in Ohio, Indiana, Illinois, Pennsylvania, New York, and those in New Jersey in the New York, N. Y., and Philadelphia, Pa., Commercial Zones. Restriction: The service authorized immediately above is restricted against service between New York, N. Y., and points in New Jersey in the Philadelphia, Pa., Commercial Zone, and between Philadelphia, Pa., and points in New

Jersey in the New York, N. Y., Commercial Zone.

Canned goods, from Whiteland, Greenwood, Indianapolis, Martinsville, Anderson, Elwood, Tipton, Peru, and Wabash, Ind., to Williamson and Charleston, W. Va., and points in Pennsylvania.

Canned goods and *agricultural commodities*, between Louisville, Bellevue, and Covington, Ky., Pittsburgh, Pa., St. Louis, Mo., points in Ohio, Indiana, Illinois, those in the Lower Peninsula of Michigan, and those in Wisconsin on and south of Wisconsin Highway 64, except that canned goods and agricultural commodities which are also food-stuffs shall not be transported between Pittsburgh, Pa., and points in Ohio, Indiana, and Illinois.

Empty containers for fresh tomatoes and fresh vegetables, from Chicago, Ill., to points in Jackson, Lenawee, and Monroe Counties, Mich.

Empty tomatoe baskets, empty tomatoe hampers, and *empty tomatoe loading racks*, from Chicago, Ill., to Edgeton, Kokomo, Hemlock, Forest, and Marion, Ind., and Curtice, Bryan, and Swanton, Ohio.

Staple groceries, except foodstuffs, in truckload lots, from Chicago, Ill., to Fort Wayne, Pendleton, Putnamville, Richmond, Plainfield, Knightstown, New Castle, Indianapolis, Logansport, and St. Meinrad, Ind.

Staple groceries, except foodstuffs, in less than truckload lots, from Chicago, Ill., to points in Indiana bounded by a line beginning at Michigan City and extending along U. S. Highway 35 to Logansport, thence along U. S. Highway 24 to the Indiana-Illinois State line, thence along the Indiana-Illinois State line to Lake Michigan, and thence along the Lake Michigan shore to point of beginning, including points on the indicated portions of the highways specified.

Salt, from Akron and Cleveland, Ohio, and Manistee, St. Clair, and Marysville, Mich., and points within five miles of each, to points in Illinois, Indiana, Ohio, Michigan, Wisconsin, those in that part of Pennsylvania on and west of U. S. Highway 219, those in that part of New York on and west of New York Highway 14, Covington, Newport, and Louisville, Ky., and St. Louis, Mo.

Subject to a "Keystone" restriction, over irregular routes:

Such general merchandise as is dealt in by chain grocery stores, and *supplies, machinery, fixtures*, and *equipment*, incidental to the production, warehousing, and sale thereof, between Akron, Cincinnati, Cleveland, Columbus, Dayton, and Toledo, Ohio; Chicago, Carbondale, and Peoria, Ill.; Detroit and Grand Rapids, Mich.; Evansville, Indianapolis, and Fort Wayne, Ind.; Louisville, Bellevue, and Covington, Ky.; Madison, Wis., Pittsburgh, Pa.; and St. Louis, Mo.

Such general merchandise as is dealt in by chain grocery stores, from Cincinnati, Ohio, to Springfield and Champaign, Ill.

Machinery, fixtures, and *equipment* incidental to the production, warehousing and sale of chain grocery store merchandise between Bellevue, Covington, Dayton, Louisville, and Newport, Ky., St. Louis, Mo., Pittsburgh, Pa., and points in Illinois, Indiana, Ohio, that part of Wisconsin on and south of Wisconsin Highway 64 and those in the lower peninsula of Michigan.

Such merchandise as is dealt in by wholesale, retail and food business houses, from Barrington, Ill., to Akron, Cleveland, Columbus, Dayton, Toledo, and Youngstown, Ohio, and Louisville, Ky.; from Louisville, Ky., Akron, Cleveland, Columbus, Dayton, Toledo, and Youngstown, Ohio, points in Ohio within 25 miles of each of such Ohio cities, Fort Wayne, Indianapolis, Muncie, South Bend, and Terre Haute, Ind., and points in Indiana within 25 miles of each of such Indiana cities, Detroit, Flint, and Grand Rapids, Mich., and points in Michigan within 25 miles of each of such Michigan cities, to Barrington, Ill.

Subject to a "Keystone" restriction, over irregular routes:

Foodstuffs, in tin and glass containers, between points in Wisconsin, on the one hand, and, on the other, points in Illinois and Indiana; between points in Indiana, on the one hand, and, on the other, points in the *Chicago, Ill., Commercial Zone*.

Macaroni, spaghetti, vermicelli, noodles and *similar products*, and *sauce* in glass containers, from Libertyville, Ill., to Bluffton, Elkhart, Fort Wayne, Indianapolis, Muncie, Richmond, South Bend, and Terre Haute, Ind., Cedar Rapids, Charles City, Clinton, Davenport, Des Moines, Dubuque, Fort Dodge, Marshalltown, Mason City, and Waterloo, Iowa, Covington, Ky., Bay City, Detroit, and Grand Rapids, Mich., St. Louis, Mo., and Cincinnati, Columbus, Dayton, Portsmouth, Toledo, Zanesville, and Xenia, Ohio.

Pickles, preserves, jams, jellies, fruit butters, prepared mustard, and *table sauces*, from Chicago, Ill., to the destination points specified immediately above.

Dried beans, from points in Michigan, to Carbondale, Cairo, West Frankfort, and Peoria, Ill., and Indianapolis, Terre Haute, Fort Wayne, Richmond, and Evansville, Ind.

Canned goods, from Alexandria, Summitville, Greenwood, Whiteland, Windfall, and Morristown, Ind., to Chicago, Ill.; from points in Indiana and Illinois to Detroit, Grand Rapids, and Lansing, Mich.; from points in Michigan and Indiana to Carbondale, Cairo, West Frankfort, Barrington and Peoria, Ill.; from points in Michigan and Illinois to Indianapolis, Terre Haute, Fort Wayne, Richmond, and Evansville, Ind.

Such merchandise as is dealt in by wholesale, retail, and food business houses, and in connection therewith, *equipment, materials*, and *supplies* used in the conduct of such business, from Chicago, Ill., to St. Joseph, Benton Harbor, Niles, Buchanan, Sturgis, and Three Rivers, Mich.: from Barrington, Ill., to Flint, Grand Rapids, and Detroit, Mich., and Fort Wayne, Indianapolis, Muncie, South Bend, Evansville, and Terre Haute, Ind.; from points in Michigan to Chicago, Ill.

No. MC 9685 (Sub No. 6), dated March 3, 1952.

Subject to a "Keystone" restriction, over irregular routes:

The commodities classified as (a) meat, meat products, and meat by-products, (b) dairy products, and (c) articles distributed by meat-packing houses, from Madison, Wis., to points in Illinois (except Barrington and Chicago) Indiana, Iowa (except Muscatine), Michigan, Ohio, those in that part of Pennsylvania on and west of U. S. Highway 219, those in that part of New York on and west of New York Highway 14, those in that part of Kentucky within one mile of the Ohio River, and those in that part of Missouri within one mile of the Mississippi River.

Fresh meats, from Prairie du Chien, Wis., to points in Illinois (except Chicago), Indiana, Iowa (except Muscatine), Michigan, Ohio, and points in that part of Pennsylvania, New York, Kentucky, and Missouri as specified above.

No. MC 9685 (Sub No. 8), dated August 31, 1951.

Subject to a "Keystone" restriction, over irregular routes:

Tinplate, from Gary, Ind., to Oconomowoc, Wis.

Skids, shipping pallets, and *angle iron*, from Oconomowoc, Wis., to Gary, Ind.

Glass containers, and *covers, caps*, and *accessories for glass containers*, and *paper cartons*, from Streator, Ill., and Alton, Ill., to points in Kentucky, Michigan, Missouri, Iowa (except from Streator to points in Iowa), points in that part of Indiana north of a line extending from the Illinois-Indiana State line along U. S. Highway 24 through Effner, Monticello, and Peru, Ind., to Huntington, Ind., and thence along U. S. Highway 224 through Decatur, Ind., to the Indiana-Ohio State line; and points in that part of Ohio north and east of a line extending from the Indiana-Ohio State line along U. S. Highway 224 to Van Wert, Ohio, thence along U. S. Highway 30 to Delphos, Ohio, thence along U. S. Highway 30N through Williamstown and Bucyrus, Ohio, to Mansfield, Ohio, thence along U. S. Highway 30 to Wooster, Ohio, to Massillon, Ohio, and thence along U. S. Highway 21 through New Philadelphia, Cambridge, and Marietta, Ohio, to the Ohio-West Virginia State line.

Paper cartons, covers and caps for glass containers and *accessories for glass containers*, from Streator, Ill., and Alton, Ill., to points in that part of Indiana on and south of a line extending from the Illinois-Indiana State line along U. S. Highway 24 through Effner, Monticello, and Peru to Huntington, and thence along U. S. Highway 224 through Decatur to the Indiana-Ohio State line; and those points in that part of Ohio on and south of a line extending from the Indiana-Ohio State line along U. S. Highway 224 to Van Wert, thence along U. S. Highway 30 to Delphos, thence along U. S. Highway 30N through Williamstown and Bucyrus to Mansfield, and thence along U. S. Highway 30 through Wooster to Massillon and on and west of a line extending from Massillon along U. S. Highway 21 through New Philadelphia, Cambridge, and Marietta to the Ohio-West Virginia State line.

No. MC 9685 (Sub No. 9), dated May 29, 1951.

Subject to a "Keystone" restriction, over irregular routes:

Soap, soap powder, washing powder, washing compound, toilet preparations, glycerine, and *related advertising matter* and *premiums,* from Jeffersonville, Ind., and points in Indiana within five miles of Jeffersonville, to points in Wisconsin, Illinois, and the Lower Peninsula of Michigan, those in Allegheny, Beaver, Butler, Erie, Fayette, Lawrence, Mercer, Venango, Washington, and Westmoreland Counties, Pa., and those in Ohio except Cincinnati, except, as already authorized, soap, soap powders, and toilet articles from Jeffersonville, to Bloomington, Champaign, Chanute Field, Danville, Freeport, Peoria, Galesburg, Petersburg, Rockford, and Chicago, Ill., and Detroit, Flint, Grand Rapids, Lansing, Muskegon, Owosso, Port Huron, Saginaw, and Sturgis, Mich.

Petroleum jelly, from McKees Rocks, Pa., to Jeffersonville, Ind., and points in Indiana within five miles of Jeffersonville.

No. MC 9685 (Sub No. 15), dated May 25, 1953.

Subject to a "Keystone" restriction, over irregular routes:

Such merchandise as is dealt in by retail food and household supply and furnishing business houses, and *equipment, materials,* and *supplies* used in the conduct of such businesses, from Clinton, Iowa, to points in Bureau, Carroll, Henry, Joe Daviess, Lee, Mercer, Ogle, Putnam, Rock Island, Stephenson, Whiteside, and Winnebago Counties, Ill., Cedar, Clinton, Des Moines, Dubuque, Henry, Jackson, Jefferson, Johnson, Jones, Louisa, Muscatine, Scott, and Washington Counties, Iowa, and Grant County, Wis., within 140 miles of Clinton: from Duluth, Minn., to points in Gogebic County, Mich., Aitkin, Anoka, Benton, Carlton, Carver, Chicago, Cook, Crow Wing, Hennepin, Isanti, Itasca, Kanabec, Kandiyoki, Lake, McLeod, Meeker, Mille Lacs, Morrison, Pine, Ramsey, Saint Louis, Sherburne, Stearns, Washington, and Wright Counties, Minn., and Ashland, Barren, Bayfield, Burnet, Douglas, Iron, Polk, Price, Rusk, Sawyer, and Washburn Counties, Wis., within 214 miles of Duluth: from Fort Wayne, Ind., to points in Adams, Allen, Cass, DeKalb, Fulton, Huntington, Kosciusko, Lagrange, Miami, Noble, Steuben, Wells, White, Whitley, and Wabash Counties, Ind., Branch and Hillsdale Counties, Mich., and Defiance, Paulding, Van Wert, and Williams Counties, Ohio, within 96 miles of Fort Wayne: from Kansas City, Mo., to points in Douglas, Franklin, Johnson, Leavenworth, Miami, and Wyandotte Counties, Kans., and Cass, Clay, Henry, Jackson, Johnson, Lafayette, Pettis, Ray, and Saline Counties, Mo., within 88 miles of Kansas City: from Onalaska, Wis., to points in Blue Earth, Brown, Dakota, Dodge, Faribault, Fillmore, Freeborn, Goodhue, Houston, LeSueur, Martin, Mower, Nicollet, Olmsted, Redwood, Rice, Steele, Wabasha, Waseca, Watonwan, and Winona Counties, Minn., Buffalo, Chippewa, Crawford, Dunn, Eau Claire, Jackson, La Crosse, Monroe, Pepin, Pierce, St. Croix, Trempealeau, and Vernon Counties, Wis., and Allamakee, Bremer, Chickasaw, Clayton, Fayette, Howard, and Winneshick Counties, Iowa, within 212 miles of Onalaska: from Louisville, Ky., to points in Clark, Crawford, Floyd, Harrison, Jefferson, Ohio, Orange, Perry, Scott, Switzerland, and Washington Counties, Ind., and Anderson, Boyle, Bourbon, Bullitt, Carroll, Casey, Clark, Estill, Fayette, Franklin, Gallatin, Garrard, Grant, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lincoln, Madison, Marion, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Powell, Pulaski, Scott, Shelby, Spencer, Taylor, Trimble, Washington, and Woodford Counties, Ky., within 134 miles of Louisville: from Peoria, Ill., to points in Des Moines and Lee Counties, Iowa, within 117 miles of Peoria: from St. Joseph, Mo., to points in Atchinson, Brown, Clay, Cloud, Doniphan, Douglas, Jackson, Jefferson, Leavenworth, Marshall, Nemaha, Pottawatomie, Republic, Riley, Shawnee, and Washington Counties, Kans., Adair, Andrew, Atchison, Buchanan, Caldwell, Clinton, Daviess, DeKalb, Gentry, Holt, Linn, Livingston, Macon, Nodaway, Sullivan, Grundy, Harrison, Mercer, Platte, Putnam, and Worth Counties, Mo., and Gage, Jefferson, Johnson, Nemaha, Pawnee, Richardson, and Thayer Counties, Nebr., within 174 miles of St. Joseph: from St. Louis, Mo., to points in Bond, Clinton, Calhoun, Fayette, Jefferson, Jersey, Madison, Marion, Monroe, Perry, Randolph, Saint Clair, and Washington Counties, Ill., and Audrain, Bollinger, Boone, Callaway, Cape Girardeau, Cole, Crawford, Franklin, Gasconade, Jefferson, Lincoln, Madison, Maries, Montgomery, Osage, Perry, Phelps, Randolph, St. Charles, St. Francois, Ste. Genevieve, St. Louis, Scott, Warren, and Washington Counties, Mo., within 150 miles of St. Louis: from Springfield, Ill., to points in Marion County, Mo., within 110 miles of Springfield: from South Bend, Ind., to points in Elkhart, Lake, La Porte, Marshall, Porter, and Saint Joseph Counties, Ind., and Berrien, Cass, and Saint Joseph Counties, Mich., within 60 miles of South Bend: from Terre Haute, Ind., to points in Clark, Coles, Crawford, Cumberland, Douglas, Edgar, Iroquois, Jasper, Lawrence, Moultrie, Richland, and Vermillion Counties, Ill., and Clay, Daviess, Fountain, Greene, Hendricks, Knox, Monroe, Montgomery, Morgan, Owen, Parke, Putnam, Sullivan, Vermillion, Vigo, and Warren Counties, Ind., within 83 miles of Terre Haute: from Toledo, Ohio to points in Hillsdale, Lenawee, and Monroe Counties, Mich., and Allen, Ashland, Crawford, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Lorain, Lucas, Ottawa, Putnam, Richland, Sandusky, Seneca, Williams, Wood and Wyandot Counties, Ohio, within 93 miles of Toledo: from Evansville, Ind. to points in Alexander, Edwards, Franklin, Gallatin, Hamilton, Hardin, Jackson, Jefferson, Johnson, Massac, Perry, Pope, Pulaski, Randolph, Saline, Union, Wabash, Washington, Wayne, White and Williamson Counties, Ill., Dubois, Gibson, Pike, Posey, Spencer, Vanderburgh, and Warrick Counties, Ind., and Ballard, Caldwell, Crittenden, Daviess, Henderson, Hopkins, Livingston, Lyon, Marshall, McCracken, McLean, Muhlenberg, Union, and Webster Counties, Ky., within 139 miles of Evansville: from Escanaba, Mich., to points in Alger, Baraga, Chippewa, Delat, Dickinson, Houghton, Iron, Keweenaw, Luce, Machinac, Marquette, Menominee, Ontonagon, and Schoolcraft Counties, Mich., and Florence, Forest, Marinette, Oconto, Oneida, and Vilas Counties, Wis., within 200 miles of Escanaba: from Youngstown, Ohio to points in Columbiana, Mahoning, Portage, Stark, Summit, and Trumbull Counties, Ohio, and Lawrence and Mercer Counties, Pa., within 40 miles of Youngstown:

No. MC 9685 (Sub No. 16), dated May 25, 1953.

Subject to a "Keystone" restriction, over irregular routes:

Such merchandise as is dealt in by retail food and household supply and furnishing business houses, and *equipment, materials,* and *supplies,* used in the conduct of such businesses, from Atlanta, Ga., to points in Baldwin, Banks, Barrow, Bartow, Bibb, Butte, Carroll, Chattahoochee, Cherokee, Clarke, Clayton, Cobb, Columbia, Coweta, Crawford, Dawson, DeKalb, Douglas, Elbert, Fayette, Floyd, Forsyth, Franklin, Fulton, Glascock, Gordon, Greene, Gwinnett, Hall, Hancock, Harris, Haralson, Hart, Heard, Henry, Jackson, Jasper, Jones, Lamar, Lincoln, Madison, Marion, McDuffie, Meriwether, Monroe, Morgan, Muscogee, Newton, Oconee, Oglethorpe, Paulding, Pickens, Pike, Polk, Putnam, Richmond, Rockdale, Schley, Spaulding, Talbot, Taliaferro, Taylor, Troup, Upson, Walton, Warren, and Wilkes Counties, Ga.: from Charlotte, N. C., to points in Alexander, Anson, Avery, Burke, Cabarrus, Caldwell, Catawba, Cleveland, Gaston, Iredell, Lincoln, McDowell, Mecklenburg, Polk, Richmond, Rowan, Rutherford, Stanly, and Union Counties, N. C., and Abbeville, Aiken, Allendale, Anderson, Bamberg, Barnwell, Beaufort, Berkeley, Calhoun, Charleston, Cherokee, Chester, Chesterfield, Clarendon, Colleton, Darlington, Dillon, Dorchester, Edgefield, Fairfield, Florence, Georgetown, Greenville, Greenwood, Hampton, Harry, Jasper, Kershaw, Lancaster, Laurens, Lee, Lexington, McCormick, Marion, Marlboro, Newberry, Oconee, Orangeburg, Pickens, Richland, Saluda, Spartanburg, Sumter, Union, Williamsburg, and York Counties, S. C.: from Greensboro, N. C., to points in Alamance, Alleghany, Ashe, Bladen, Brunswick, Caswell, Chatham, Columbus, Craven, Cumberland, Davidson, Davie, Dublin, Durham, Edgecomb, Forsyth, Franklin, Granville, Greene, Guilford, Halifax, Harnett, Hoke, Johnston, Jones, Lee, Lenoir, Montgomery, Moore, Nash, New Hanover, Northampton, Onslow, Orange, Pender, Person, Pitt, Randolph, Richmond, Robeson, Rockingham, Sampson, Scotland, Stokes, Surry, Vance, Ware, Warren, Watauga, Wayne, Wilkes, Wilson, and Yadkin Counties, N. C.; and Carroll, Grayson, Halifax, Henry, Mecklenburg, Patrick and Pittsylvania Counties, Va.: from Jacksonville, Fla., to points in Alachua, Baker, Bay, Bradford, Brevard, Broward, Calhoun, Charlotte, Citrus, Clay, Collier, Columbia, Dade, DeSota, Dixie, Duval, Escanaba, Flagler, Franklin, Gadsden, Gilchrist, Glades, Gulf, Hamilton, Hardee, Hendry, Hernando, Highlands, Hillsborough, Holmes, Indian River, Jackson, Jefferson, Lafayette, Lake, Lee, Leon, Levy, Liberty, Madison, Manatee, Okaloosa, Palm Beach, Pasco, Pinellas, Polk, Putnam, Saint Johns, Saint Lucie, Santa Rosa, Sarasota, Seminole, Suwanee, Sumter, Taylor, Union, Volusia, Wakulla, Walton, and Washington Counties, Fla.; and Appling, Atkinson, Bacon, Baker, Ben Hill, Berrien, Bleckley, Brantley, Brooks, Bryan, Bullock, Burke, Calhoun, Camden, Candler, Charlton, Chatham, Clay, Clinch, Echols, Coffee, Colquitt, Cook, Crisp, Decatur, Dodge, Dooly, Dougherty, Early, Effingham, Emanuel, Evans, Glynn, Grady, Houston, Irwin, Jeff Davis, Jefferson, Jenkins, Johnson, Lanier, Laurens, Lee, Liberty, Long, Lowndes, McIntosh, Macon, Miller, Mitchell, Montgomery, Peach, Pierce, Pulaski, Quitman, Randolph, Screven, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Toombe, Tattnall, Treutlen, Turner, Twiggs, Ware, Washington, Wayne, Webster, Wheeler, Wilcox, Wilkinson, and Worth Counties, Ga.: from points in Washington, D. C., to points in Washington, D. C., and points in Anne Arundel, Calvert, Charles, Frederick, Howard, Montgomery, Prince Georges, and Saint Marys Counties, Md.; and Arlington, Fairfax, Loudoun, and Prince William Counties, Va.: from Nashville, Tenn., to points in Catoosa, Chattooga, Dade, Walker and Whitfield Counties, Ga.; Allen, Bafren, Christian, Clinton, Cumberland, Logan, Metcalfe, Monroe, Simpson, Todd, Trigg, Warren, and Wayne Counties, Ky.; and Bedford, Benton, Bledsoe, Cannon, Cheatham, Clay, Coffee, Davidson, Decatur, DeKalb, Dickson, Franklin, Giles, Grundy, Hardin, Hamilton, Hickman, Houston, Humphreys, Jackson, Lawrence, Lewis, Lincoln, Macon, Marshall, Marion, Maury, Montgomery, Moore, Overton, Perry, Putnam, Pickett, Robertson, Rutherford, Sequatchie, Smith, Stewart, Sumner, Trousdale, Van Buren, Warren, Wayne, White, Williamson, and Wilson Counties, Tenn.: from Huntington, W. Va., to points in Bath, Breathitt, Boyd, Carter, Elliott, Flemming, Floyd, Greenup, Johnson, Knott, Lawrence, Letcher, Lewis, Magoffin, Martin, Mason, Menifee, Morgan, Perry, Pike, Rowan, and Wolfe Counties, Ky.; Gallin, Lawrence, and Scioto Counties, Ohio; and Boone, Braxton, Calhoun, Cabell, Clay, Fayette, Gilmer, Jackson, Kanawha, Lincoln, Logan, Mason, Mingo, Nicholas, Pleasants, Putnam, Ritchie, Roane, Wayne, Wirt, and Wood Counties, W. Va.: from Harrisburg, Pa., to those points in Washington County, Md., on and north of U. S. Highway 40 and on and east of U. S. Highway 522; and Adams, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, Perry, and York Counties, Pa.: from Erie, Pa., to points in Allegany, Cattaraugus and Chautauqua Counties, N. Y.; Ashtabula, Geauga, Lake, and Trumbull Counties, Ohio; and Cameron, Crawford, Elk, Erie, Forest, McKean, Mercer, Potter, Venango, and Warren Counties, Pa.: from Binghamton, N. Y., to points in Broome, Chumung, Chenango, Cortland, Delaware, Otsego, Schuyler, Tioga, and Tompkins Counties, N. Y., and those points in Steuben County, N. Y., on and east of U. S. Highway 15 and New York Highway 54; and Bradford, Lackawanna, Pike, Sullivan, Susquehanna, Wayne, and Wyoming Counties, Pa.: from Knoxville, Tenn., to points in Catoosa, Dade, Fannin, Gilmer, Habersham, Lumpkin, Murray, Rabun, Stephens, Towns, Union, Walker, White and Whitfield Counties, Ga.; Bell, Harlan, McCreary, and Whitley Counties, Ky.; Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, Mitchell, Swain, Transylvania, and Yancey Counties, N. C.; Anderson, Blount, Bradley, Campbell, Carter, Claiborne, Cooke, Cumberland, Fentress, Grainger, Greene, Hamilton, Hancock, Hamblen, Hawkins, Jefferson, Johnson, Knox, Loudon, McMinn, Meigs, Monroe, Morgan, Polk, Rhea, Roane, Scott, Sevier, Sullivan, Unicoi, Union, and Washington Counties, Tenn.; and Buchanan, Dickenson, Lee, Russell, Scott, Washington, and Wise Counties, Va.: from Memphis, Tenn., to points in Arkansas, Ashley, Bradley, Calhoun, Chicot, Clark, Clay, Cleburne, Cleveland, Columbia, Conway, Craighead, Crittenden, Cross, Dallas, Desha, Drew, Faulkner, Fulton, Garland, Grant, Greene, Hot Springs, Independence, Izard, Jackson, Jefferson, Lawrence, Lee, Lincoln, Lonoke, Mississippi, Monroe, Nevada, Ouschita, Perry, Phillips, Poinsett, Prairie, Pulaski, Randolph, St. Francis, Saline, Sharp, Stone, Union, Van Buren, White, and Woodruff Counties, Ark., Claiborne, East Carroll, Madison, Morehouse, Ouschita, Richland, Union, and West Carroll Parishes, La.; Alcorn, Attala, Benton, Bolivar, Calhoun, Carroll, Chickasaw, Choctaw, Clay, Coahoma, DeSota, Grenada, Hinds, Holmes, Humphreys, Issaquena, Itawamba, Kemper, LaFayette, Lauderdale, Leake, Lee, Leflore, Lowndes, Madison, Marshall, Monroe, Montgomery, Nesheba, Newton, Noxubee, Oktibbeha, Panola, Pontotoc, Prentiss, Quitman, Rankin, Scott, Sharley, Sunflower, Tallahatchie, Tate, Tippah, Tishomingo, Tunica, Union, Warren, Washington, Webster, Winson, Yalobusha, and Yazoo Counties, Miss.; Dunklin, and Pemiscot Counties, Mo.; and Carroll, Chester, Crockett, Dyer, Fayette, Gibson, Hardeman, Henderson, Henry, Lake, Lauderdale, McNairy, Madison, Maywood, Obion, Shelby, Tipton, and Weakley Counties, Tenn.: from Schenectady, N. Y., to points in Berkshire, Franklin, Hampden, and Hampshire Counties, Mass.; Cheshire County, N. H.; Albany, Columbia, Dutchess, Fulton, Greene, Hamilton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Ulster, Warren, and Washington Counties, N. Y.; and those points in Orange County, N. Y., on and north of U. S. Highway 6; and Bennington, Rutland, and Windham Counties, Vt.: from Camden, N. J., to points in Delaware County, Pa.; those points in Newcastle County, Del., located on and north of Delaware Highway 41; and points in Burlington, Camden, Gloucester, and Salem Counties, N. J., and those points in Cumberland County, N. J., located on and north of New Jersey Highways 49 and 47.

No. MC 9685 (Sub No. 18), dated November 6, 1952.

Subject to a "Keystone" restriction, over irregular routes: *Packing house products*, from Austin, Minn., to St. Louis, Mo., Louisville, Ky., points in Indiana, Iowa (except Muscatine), Michigan, New York, Ohio, Pennsylvania, West Virginia, and those in that part of Illinois south and west of a line extending westerly from the Indiana-Illinois State line along U. S. Highway 30 through Joliet and Aurora to junction U. S. Highway 51, and thence north along U. S. Highway 51 through Rockford to the Illinois-Wisconsin State line, including points on the specified highways.

No. MC 9685 (Sub No. 22), dated August 11, 1952.

Subject to a "Keystone" restriction, over irregular routes:

Syrup, for carbonated beverages, from Chicago, Ill., to points in Wisconsin, Iowa, and Illinois, and *empty syrup containers*, on return.

No. MC 9685 (Sub No. 26), dated May 19, 1952.

Subject to a "Keystone" restriction, over irregular routes:

Glass containers and accessories therefor, and *paper cartons*, used in the packing or shipping of glass containers, from Winchester, Ind., to points in Illinois (except Chicago, and except glass containers to Alton and Streator), Michigan, Missouri, (except St. Louis), Ohio (except Akron, Alliance, Baltimore, Bucyrus, Cincinnati, Cleveland, Columbus, Dayton, and Plain City, and except glass containers to Lancaster) New York, West Virginia and Wisconsin: from South Connellsville, Pa., to points in New York (except points in the New York, N. Y., Commercial Zone as defined by the Commission, and Long Island) and West Virginia (except Fairmont, Morgantown, and Clarksburg).

Glassware, glass containers, and accessories therefor, and *paper cartons* used in the packing or shipping of glass articles, from Lancaster, Ohio, to points in Illinois (except glassware and glass containers to Alton and Streator), Michigan, New York (except points in the New York, N. Y., Commercial Zone, as defined by the Commission, and Long Island), and West Virginia.

Processed silica sand and *soda ash*, from points in the Lower Peninsula of Michigan to Lancaster, Ohio, and Winchester, Ind.

Paper cartons, used in the packing or shipping of glass articles, from points in Ohio and Michigan to Winchester, Ind.

Iron and steel moulds, used in forming glass containers, and *machinery* used in the manufacture of glass containers, between Winchester, Ind., and Lancaster, Ohio, on the one hand, and, on the other, South Connellsville, Pa. No. MC 9685 (Sub No. 31), dated March 14, 1951. Subject to a "Keystone" restriction, over irregular routes:

Glass containers and *fibreboard boxes*, from Charleston and Huntington, W. Va., to points in Pennsylvania except those on and east of U. S. Highway 11, and to points in New York except those in the New York, N. Y., commercial zone: from Fairmont, W. Va., to points in Pennsylvania except those on and east of U. S. Highway 11, to points in New York, and to points in Kentucky except those in the Cincinnati, Ohio, commercial zone.

Empty pallets used in the transportation of glass containers, on return.

No. MC 9685 (Sub No. 32), dated May 31, 1951.

Subject to a "Keystone" restriction, over irregular routes:

Fresh pimentos, from Swedesboro, N. J., to Le Sueur, Minn., and *used empty containers*, on return.

No. MC 9685 (Sub No. 33), dated November 14, 1952.

Subject to a "Keystone" restriction, over irregular routes:

Canned goods, from Le Sueur, Cokato, Montgomery, Watertown, Winsted, Blue Earth, Winthrop, and Glencoe, Minn., to points in Indiana, Ohio, Pennsylvania, New York, Illinois (except Chicago), the Lower Peninsula of Michigan, and Louisville, Covington, and Bellevue, Ky.

No. MC 9685 (Sub No. 37), dated December 10, 1952.

Canned goods, from points in Illinois, except Chicago, New York, Pennsylvania, points in the lower peninsula of Michigan, and those in Wisconsin on and south of Wisconsin Highway 64 to Charleston, Huntington, and Williamson, W. Va.

No. MC 9685 (Sub No. 46), dated May 19, 1952.

Salt, in containers, from Rittman, Ohio, to points in Illinois, Indiana, Michigan, New York, Pennsylvania, West Virginia, and points in New Jersey within the New York, N. Y., Commercial Zone, and those in New Jersey within the Philadelphia, Pa., Commercial Zone, St. Louis, Mo., Covington, Newport, and Louisville, Ky.: from Akron, Ohio to points in West Virginia, and those in Pennsylvania on and east of U. S. Highway 219, those in New York on and east of New York Highway 14, and points in New Jersey within the New York, N. Y., Commercial Zone, and points in New Jersey within the Philadelphia, Pa. Commercial Zone: from Silver Springs, N. Y., to points in Pennsylvania, West Virginia, and those in New York on and south of U. S. Highway 6, and points in New Jersey within the New York, N. Y., Commercial Zone, and points in New Jersey within the Philadelphia, Pa., Commercial Zone.

No. MC 9685 (Sub No. 47), dated April 26, 1951.

Subject to a "Keystone" restriction, over irregular routes:

Glass containers, glassware, and *bottle caps*, from Winchester, Inc., to points in Michigan, Missouri, Ohio, Wisconsin, and Illinois; from Lancaster, Ohio, to points in Illinois and Michigan.

No. MC 9685 (Sub No. 50), dated September 22, 1953.

Dressed poultry and *eggs*, from Monroe City, Laclede, Chillicothe, and St. Louis, Mo., to Indianapolis, Ind., Cleveland, Navarre, and Akron, Ohio, Lancaster, Erie, Scranton, York, Harrisburg, Philadelphia, and Lebanon, Pa., Chester and Baltimore, Md., Jersey City and Newark, N. J., Binghamton, Buffalo, Utica, Syracuse, Auburn, Rochester, and New York, N. Y., Springfield and Boston, Mass., Norfolk and Richmond, Va., and Washington, D. C.; from Chillicothe, Mo., to Pottstown, Pa., and Gloucester, Mass.

No. MC 13145 (Sub No. 9), (CORRECTION), published issue November 27, 1957, at page 9494, filed October 16, 1957, S. W. HIXSON, doing business as HIXSON TRUCK LINE, 941 Canton Road (P. O. Box 2771), Akron 12, Ohio. Applicant's attorney: Harold G. Hernly, 1624 Eye Street NW., Washington, D. C. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in a portion of No. MC 13145, dated April 14, 1949.

Such commodities as are manufactured, processed and dealt in by rubber manufacturers and steel products manufacturers and *equipment, materials*, and *supplies* used in the conduct of such business, over irregular routes, from Akron, Ohio to points and places in Rhode Island, Massachusetts, Connecticut, those in that part of New York east and north of a line beginning at Port Jervis, N. Y., and extending along U. S. Highway 209 to Kingston, N. Y., thence along U. S. Highway 9W to Albany, N. Y., thence along U. S. Highway 20 to junction U. S. Highway 11, thence along U. S. Highway 11 to Watertown, N. Y., and thence along New York Highway 12 to Clayton, N. Y., including the points named and including New York, N. Y., points and places on Long Island, N. Y., those on the indicated portions of the highways specified, and those in New Jersey on and north of New Jersey Highway 33.

NOTE: Applicant's attorney correctly advises by letter dated December 3, 1957, that the above-described operations are not subject to a "Keystone" restriction. The purpose of this republication is to strick from the previous notice of filing reference erroneously made to such restriction as pertains to the above operations. The notice as published November 27, 1957, in all other respects, remains unchanged.

No. MC 15583 (Sub No. 14) filed October 24, 1957, WILBUR H. JOHNS, 327 North Reservoir Street, Lancaster, Pa. Applicant's representative: Bernard N. Gingerich, Quarryville, Pa. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 15583, dated April 22, 1957.

Tomatoes, over irregular routes, from Girard and North Girard, Pa., to Medina, N. Y., and Bowling Green and Fremont, Ohio, and *rejected shipments and empty containers* on return.

Prepared food products, and *materials, equipment*, and *supplies* used in, or incidental to, the preparation, packing, and sale thereof, over regular routes, subject to a "Keystone" restriction, between Salem, N. J., and Pittsburgh, Pa., serving the intermediate points of Harrisburg and Chambersburg, Pa.; between Washington, D. C., and Pittsburgh, Pa., serving no intermediate points; between Camden, N. J., and Salem, N. J., serving no intermediate points; between Philadelphia, Pa., and Lancaster, Pa., serving no intermediate points.

No. MC 15583 (Sub No. 12), dated June 19, 1950.

Fresh fruits and vegetables and *empty containers* therefor, over irregular routes, from Brookville, Pa., and points within 25 miles thereof, to Medina, N. Y., and points within 15 miles thereof, and *empty fruit and vegetable containers*, on return.

NOTE: Applicant is authorized to conduct operations as a *common* carrier in Certificates Nos. 78118 Subs 1, 2, and 4 dated July 6, 1956, July 6, 1956 and November 4, 1957, respectively.

No. MC 17094 (Sub No. 1) filed October 22, 1957, NATE'S TRUCK LINE, INC., 3434 Walnut Street, Denver, Colo. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 17094, dated August 1, 1956.

Canned goods, over a regular route, from Chicago, Ill., to Denver, Colo., serving the intermediate and off-route points in the Chicago, Ill., Commercial Zone, as defined by the Commission, restricted to pick-up only.

Fresh meats, and *packing-house products, equipment and supplies*, subject to a "Keystone" restriction, over a regular route, between Denver, Colo., and Chicago, Ill., serving the intermediate points of Omaha, Nebr., and Des Moines, Iowa; and the off-route point of Ottumwa, Iowa.

No. MC 18383 (Sub No. 2) filed November 6, 1957, ALVAH T. LONGLEY, 29 Pembroke Road, Concord, N. H. Applicant's attorney: Joseph Kovner, 88 North Main Street, Concord, N. H. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 18383, dated December 16, 1953.

Granite, over irregular routes, from Barre, Vt., to Concord, N. H.: between Concord, N. H., on the one hand, and, on the other, points in that part of Massachusetts on and east of U. S. Highway 3.

NOTE: Applicant conducts *common* carrier operations by virtue of Certificates No. 52855 and Sub 1, issued January 23, 1943 and January 7, 1943 respectively.

No. MC 29573 (Sub No. 5) filed October 28, 1957, JOSEPH L. SCHNEIDER, 226 West Prairie Street, Marengo, Ill. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 29573, dated March 26, 1942.

Malt beverages, still and carbonated beverages, advertising matter and ice when accompanying such beverages, and *empty beverage containers*, over irregular routes, between Milwaukee, Wis., on the one hand, and, on the other, Rockford and Freeport, Ill.

No. MC 32170 (Sub No. 1) filed October 22, 1957, MAX RUDOLPH, doing business as MAX RUDOLPH TRUCKING, P. O. Box 828, Santa Paula, Calif. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 32170, dated May 3, 1949.

Citrus fruits, over irregular routes, from Santa Paula, Limco, Sespe, and Fillmore, Calif., to Los Angeles Harbor, Calif.

Fertilizer, from Los Angeles Harbor, Calif., to the above-specified California points.

No. MC 39106 (Sub No. 2) filed October 28, 1957, HARVEY TRANSFER COMPANY, Box 285, Middletown, Ohio. Applicant's attorney: Richard H. Brandon, Hartman Building, Columbus 15, Ohio. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 39106, dated February 2, 1956.

Paper, paper products, fiber boxes, and *materials* and *equipment* used or useful in the manufacture thereof, over a regular route, between Dayton, Ohio, and Newport, Ky., serving all intermediate points and the off-route point of Excello, Ohio.

Commodities as indicated above, over irregular routes, between Middletown, Lockland, Franklin, and Excello, Ohio, on the one hand, and, on the other, points in Ohio, Indiana, and Kentucky.

Composition or prepared roofing, in rolls or shingles, and *materials* used in the installation thereof, when shipped therewith, over irregular routes, from Franklin, Ohio, to points in Indiana and Kentucky.

No. MC 41041 (Sub No. 32), filed November 5, 1957, CAPITAL EXPRESS, INC., U. S. 40, P. O. Box 71, Elkton, Md. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 41041, dated February 15, 1957.

Wine, soft drinks, and *malt beverages*, over irregular routes, from Newark, N. J., New York, N. Y., Reading, Lebanon, and Philadelphia, Pa., Hagerstown, and Baltimore, Md., to Washington, D. C.

Empty containers for the above-specified commodities, on return.

No. MC 45868 (Sub No. 11), filed October 22, 1957, FULLERTON MOTOR TRUCK SERVICE, INC., 1817 West 32d Place, Chicago, Ill. Applicant's attorney: Carl L. Steiner, 39 South La Salle Street, Chicago 3, Ill. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 45868, dated January 25, 1954.

Such commodities, as are dealt in by chain retail and mail-order department stores, over irregular routes, subject to a "Keystone" restriction, from Chicago, Ill., to points in Indiana, Iowa, Michigan, and Wisconsin; and *rejected or returned shipments* of the above-specified commodities, on return.

Panelboard, lumber, and *mill work and supplies, paper boxes, fibre boxes, wooden boxes, electric refrigerators, oil burners, water coolers, stokers*, and *air-conditioners*, from Chicago, Ill., to points in Indiana, Iowa, Michigan, and Wisconsin; and rejected or returned shipments of the above-specified commodities, on return.

Roofing and *roofing materials*, from Chicago and Wilmington, Ill., to points in Iowa, Indiana, Michigan, and Wisconsin; and *rejected or returned shipments* of roofing and roofing materials, on return.

Compressed gases (not including petroleum gases), in multiple-cylinder banks, and in multi-cylinder or tube trailers, from Chicago and Sterling, Ill., to points in Indiana, Iowa, and Wisconsin, *empty or partially empty multiple-cylinder banks*, and *multiple-cylinder or tube trailers*, on return.

Liquid asphalt, in bulk, in tank vehicles, between points in the Chicago, Ill., Commercial Zone as defined by the Commission on the one hand, and, on the other, points in Indiana, Wisconsin, Iowa, Michigan, Illinois, Missouri, Ohio, and Kentucky; from Lemont, Ill., to points in Indiana, Wisconsin, Iowa, Michigan and Ohio.

No. MC 50132 (Sub No. 38), filed October 22, 1957, CENTRAL & SOUTHERN TRUCK LINES, INC., 312 West Morris Street, Caseyville, Ill. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 50132, dated May 18, 1950.

Packing-house products, canned goods, dairy products, containers and *packages* for such commodities, *stationery, wrapping paper, advertising matter*, and *eggs*, from National City (National Stockyards), Ill., to Haynesville and Lake Charles, La., over various specified regular routes, service is authorized from the intermediate points of East St. Louis and St. Louis, restricted to pick-up only, and to the intermediate points of Little Rock, Pine Bluff, Camden, Louann, Smackover, Norphlet, El Dorado, and Junction City, Ark., and those in Louisiana restricted to delivery only; and to the off-route points of Urbana, Strong, and Huttig, Ark., restricted to delivery only, served from El Dorado over U. S. Highway 82 via Urbana and Strong to junction Arkansas Highway 129, thence over Arkansas Highway 129 to Huttig.

Packing-house products, canned goods, dairy products, and *eggs*, from National City (National Stockyards), Ill., to Camp Claiborne, La.; service is authorized to the intermediate and off-route points of Camp Livingston, Camp Beauregard, and Camp Stafford, La., restricted to delivery only.

Salad dressings and relishes, and *containers and packages* for these commodities, from St. Louis, Mo., and East St. Louis., Ill., to Haynesville and Monroe, La., over various specified regular routes, from St. Louis and East St. Louis to Haynesville, as specified above; from St. Louis and East St. Louis to Monroe, as specified above; service is authorized to the intermediate points of Little Rock, Pine Bluff, Camden, Louann, Smackover, Norphlet, El Dorado, and Junction City, Ark., and Ruston, Arcadia, Gibsland, Minden, and Homer, La., restricted to delivery only; and to the off-route points of Urbana, Strong, and Huttig, Ark., restricted to delivery only, served from El Dorado over U. S. Highway 82 via Urbana and Strong to junction Arkansas Highway 129, thence over Arkansas Highway 129 to Huttig.

Packing-house products, canned goods, salad dressings and relishes, dairy products, containers and packages for these commodities, stationery, wrapping paper, advertising matter and *eggs*, from Memphis, Tenn., to Monroe, La.; serving no intermediate points.

Packing-house products, canned goods, salad dressings and relishes, dairy products, containers and packages for these commodities, stationery, wrapping paper, advertising matter, from Monroe and Ruston, La., to Lake Charles, La., over various specified regular routes, serving no intermediate points.

Fresh and cured meats, from Lake Charles, La., to Little Rock, Ark., serving the intermediate point of El Dorado, Ark., restricted to delivery only.

Packing-house products and *dairy products*, over irregular routes, from East St. Louis and National City, Ill., to points in Kentucky, North Carolina and South Carolina: from Omaha, Nebr., Kansas City, and Wichita, Kans., and Chicago, Ill., to points in Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, and Georgia: from St. Louis, Mo., to points in Kentucky, Tennessee, Alabama, and Mississippi.

Canning company products such as *catsup, fruit salads, pork and beans* and others not specified, from Jefferson, Underwood, Franklin, Elwood, Whiteland, Indianapolis, Austin, Tipton, Anderson, Martinsville, Greenwood, Peru, and Wabash, Ind., to points in Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia: from Newport, Jefferson City, Sevierville, and Tellico Plains, Tenn., to Jeffersonville, Tipton, Anderson, Indianapolis, Martinsville, Greenwood, Peru, and Wabash, Ind.

Canned fruits and vegetables, pimentos and pimento hulls, canned or in brine, and *peanut butter*, from Haddock, Ga., to St. Louis, Mo., and points in Kentucky, Tennessee, Indiana, Illinois and Ohio.

Fresh meats, packing-house products, canned food products, cheese, butter, and *butter substitutes*, from National City and East St. Louis, Ill., to points in Tennessee, Mississippi, Alabama, and Georgia: *rejected shipments* of the above-specified commodities, from the above-specified destination points to Haddock, Ga., and National City and East St. Louis, Ill.

No. MC 51102 (Sub No. 7) filed November 7, 1957, EMMA BERGER, doing business as L. BERGER AND SON, 148 Moore Street, Philadelphia, Pa. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 51102, dated May 17, 1941.

Flaxseed, linseed oil, salad oil, and *products of flaxseed and linseed*, over irregular routes, from Philadelphia, Pa., to Yonkers and New York, N. Y., points in Bergen, Hudson, Essex, Union, Middlesex, Camden, Gloucester, Salem, and Mercer Counties, N. J., that part of Passaic County, N. J., on and south of U. S. Highway 202, and that part of Burlington County, N. J., on the north of New Jersey Highway 40.

No. MC 51102 (Sub No. 1), dated December 23, 1940.

Linseed oil and salad oils, in tank trucks, over regular and irregular routes, from Philadelphia, Pa., to Baltimore, Md., and New Haven, Conn., and points within 25 miles of each, as follows: From Philadelphia over U. S. Highway 1 to Baltimore, thence over irregular routes to points within 25 miles of Baltimore; from Philadelphia over U. S. Highway 13 to State Road, Del., thence over U. S. Highway 40 to Baltimore, and thence over irregular routes to points within 25 miles of Baltimore; from Philadelphia over U. S. Highway 1 to New Haven, Conn., thence over irregular routes to points within 25 miles of New Haven.

No. MC 51102 (Sub No. 5), dated March 3, 1947.

Animal and vegetables tallows, animal greases, soap stock, fatty acids, oleic acid, and *whitealene*, in bulk, in tank trucks, over irregular routes, between Philadelphia, Pa., on the one hand, and, on the other, Oella and Bel Air, Md., and points within two miles of Bel Air, Camden and Newark, N. J., points within 15 miles of Newark, and points in New York in the New York, N. Y., Commercial Zone as defined by the Commission.

No. MC 52403 (Sub No. 5) filed November 7, 1957, HOWARD E. BLACKMON, doing business as HOWARD BLACKMON TRUCK SERVICE, 1300 40th Street, Kenosha, Wis. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 52403, dated September 14, 1945.

Fertilizer, over irregular routes, from Kenosha, Wis., to points in Illinois north of Illinois Highway 10 from the Indiana-Illinois State line to Danville, Ill., and U. S. Highway 150 from Danville to Galesburg, Ill., and east of U. S. Highway 150 from Galesburg to Moline, Ill., including points on the indicated portions of the highways specified.

Fertilizer materials, over irregular routes, from Chicago, Ill., to Kenosha, Wis.

No. MC 52403 (Sub No. 3), dated August 28, 1951.

Lime and lime products, over irregular routes, from High Cliff, Knowles, and Marblehead, Wis., and points within five miles of each, to points in that part of Illinois on and north of Illinois Highway 10.

No. MC 52403 (Sub No. 4), dated August 28, 1953.

Canned goods and *canning factory supplies and equipment*, over irregular routes, between points in Jefferson, Dane, Dodge, Fond du Lac, Sheboygan, and Waukesha Counties, Wis., on the one hand, and, on the other, points in McHenry, Lake, Cook, Kane, Winnebago, Boone, Du Page, and Will Counties, Ill.

NOTE: Application is authorized to conduct operations as a *common* carrier in Certificate No. MC 36556 dated April 26, 1941.

No. MC 53262 (Sub No. 3) filed October 23, 1957, McINTOSH MOVERS, INC., 4054 Lyndale Avenue North, Minneapolis, Minn. Applicant's attorney: Donald A. Morken, Eleven Hundred First National-Soo Line Building, Minneapolis 2, Minn. For authority to operate as a common carrier of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 53262, dated October 4, 1956.

New furniture, over irregular routes, from Dubuque, Iowa, and Minneapolis, St. Paul, and Anoka, Minn., to points in Illinois, Iowa, Wisconsin, North Dakota, South Dakota, Montana, and the Upper Peninsula of Michigan.

Washing machines, over irregular routes, from Rock Island, Ill., and West Bend, Wis., to Minneapolis and St. Paul, Minn.

Agricultural implements, over irregular routes, from Milwaukee, Wis., to Minneapolis and St. Paul, Minn.

Furniture and *institutional equipment*, over irregular routes, from Chicago, Ill., to points in Wisconsin, Minnesota, Missouri, Indiana, Michigan, Ohio, and Kentucky.

Beauty shop equipment and *barbers' chairs and fixtures*, over irregular routes, from Chicago, Ill., to points in Indiana, Wisconsin, and Minnesota.

NOTE: Applicant conducts *common* carrier operations by virtue of Certificate No. MC 68993, dated October 4, 1956.

No. MC 62309 (Sub No. 1) filed October 22, 1957, HOWARD T. WHERLEY, 127 North Queen Street, Littlestown, (Adams County), Pa. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 62309, dated June 28, 1941.

Leather, over a regular route from Westminster, Md., to Littlestown, Pa., serving no intermediate or off-route points.

No. MC 65123 (Sub No. 2) filed November 7, 1957, FOURTEENTH AVENUE CARTAGE CO., A Corporation, 1038 21st Street, Detroit, Mich. Applicant's attorney: William R. Hefferan, 1419–25 Majestic Building, Detroit 26, Mich. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 65123, dated August 23, 1943.

Packing-house products, and *packing-house by-products* including *fresh meats, butter, butter substitutes, canned goods*, and *drugs*, and *supplies* and *materials*, incidental to the operation of a packing-house plant, over irregular routes, subject to a "Keystone" restriction, from Detroit, Mich., to points in Michigan within 100 miles of Detroit.

No. MC 65493 (Sub No. 2) filed October 22, 1957, SCOTT-NORBY COMPANY, A CORPORATION, 150 East 58th Street, Los Angeles 11, Calif. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 65493, dated August 18, 1949.

Flour, over irregular routes, from Los Angeles Harbor and Long Beach, Calif., to Los Angeles, Calif.

No. MC 67468 (Sub No. 4), filed October 23, 1957, HOWARD TRUCK LINE, INC., 2329 South Broad Street, Chattanooga, Tenn. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 67468, dated February 14, 1951.

Corrugated boxes, pulp board sheets, solid fibre boxes, waste paper, toys, wood boxes, and *materials and supplies* used in the manufacture of wood and paper products over regular routes, between Chattanooga, Tenn., and Atlanta, Ga., serving all intermediate points and the off-route point of Rossville, Ga.

No. MC 67468 (Sub No. 3), dated February 14, 1951.

Acetylene and oxygen gases in steel cylinders, calcium carbide in drums, and *empty steel cylinders*, over regular routes, between Chattanooga, Tenn., and Atlanta, Ga., and Birmingham, Ala., serving no intermediate points.

No. MC 68833 (Sub No. 3) filed November 6, 1957, KRAFT & SON CARTING CORPORATION, 144 Archie Street, Buffalo, Franklin Street at Mohawk, Buffalo 2, N. Y. Applicant's representative: Floyd B. Piper, Crosby Building, Franklin Street at Mohawk, Buffalo 2, N. Y. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 68833 (Sub No. 1), dated July 31, 1953.

Uncrated store and restaurant fixtures and equipment, from Buffalo, N. Y., to points in Pennsylvania on and west of U. S. Highway 219, and points in Trumbull, Mahoning, and Portage Counties, Ohio.

Empty containers, and *other such facilities* used in transporting the above-described commodities, and *used store and restaurant fixtures and equipment*, on return.

Uncrated store fixtures and equipment, from Buffalo, N. Y., to all points in Ohio except those in Trumbull, Mahoning, and Portage Counties.

Uncrated used store fixtures and equipment, from all points in Ohio except those in Trumbull, Mahoning, and Portage Counties, to Buffalo, N. Y.

No. MC 69360 (Sub No. 1) filed November 8, 1957, W. O. CROW AND E. J. HUNTER, doing business as CROW TRANSPORTATION COMPANY, 4690 Worth Street, Los Angeles 63, Calif. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 69360, dated May 12, 1949.

Materials, supplies, and equipment used in acetylene welding, paint and varnish reducing compounds, chemicals, *compressed gas* in cylinders, *ferro-alloys,* and *empty cylinders and containers,* used for such commodities, over irregular routes, between Los Angeles and Vernon, Calif., and points in Los Angeles County within three miles of Ninth and Indiana Streets, Los Angeles, on the one hand, and, on the other, Los Angeles Harbor and Long Beach, Calif.

No. MC 70136 (Sub No. 6) filed October 25, 1957, JOSEPH HOLLISTER, doing business as TORONTO SERVICE TERMINAL, 106 South Fourth Street, Toronto, Ohio. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 70136 (Sub No. 2), dated July 9, 1957.

Building stone, over irregular routes, from Freeport, Ohio, and points within two miles thereof, to Pittsburgh, Pa., and points within ten miles of Pittsburgh.

Such merchandise as is dealt in by wholesale, retail, and chain grocery and food business houses; and in connection therewith, *equipment, materials, and supplies* used in the conduct of such business, subject to a "Keystone" restriction, over irregular routes, between Pittsburgh, Pa., on the one hand, and, on the other, Mingo Junction, Wellsville, Steubenville, and Toronto, Ohio; and Wellsburg, New Cumberland, Hollidays Cove, Weirton, and Follansbee, W. Va.: between Steubenville, Ohio, on the one hand, and, on the other, Mingo Junction; Wellsville, East Liverpool, and Toronto, Ohio, Wellsburg, New Cumberland, Hollidays Cove, Weirton, Chester, and Follansbee, W. Va., and Midland, Pa.

Paper and paper articles as defined by the Commission, subject to a "Keystone" restriction, over irregular routes, from Steubenville, Ohio, to points in Michigan, except points in the Counties of Allegan, Barry, Berrien, Branch; Calhoun, Cass, Eaton, Ionia, Kalamazoo, Kent, Ottawa, St. Joseph, and Van Buren; and *empty containers,* on return.

No. MC 70221 (Sub No. 4) filed November 6, 1957, SUPERIOR TRANSPORTATION COMPANY, INC., 21 Cardiff Street, Johnstown, Pa. Applicant's attorney: S. Harrison Kahn, 726 Investment Building, Washington, D. C. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 70221, dated November 29, 1949.

Peanuts, over a regular route, from Suffolk, Va., to Johnstown, Pa., serving no intermediate points.

Sugar, canned goods, beans, and *rice,* over irregular routes, from Swedesboro, N. J., to Johnstown, Blairsville, and Indiana, Pa.; from Baltimore, Md., to points in Armstrong, Cambria, Clearfield, Indiana, Jefferson and Westmoreland Counties, Pa.

No. MC 72230 (Sub No. 6) filed November 4, 1957, GROWERS COLD STORAGE CO., INC., Waterport, N. Y. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 72230, dated June 24, 1952.

Frozen agricultural commodities, fish and *meats,* over irregular routes, between Waterport, N. Y., on the one hand, and, on the other, Elmira, Ithaca, Rochester and Syracuse, N. Y., and Jersey City, N. J.; between Elmira, N. Y., on the one hand, and, on the other Ithaca, Rochester and Syracuse, N. Y., and Jersey City, N. J.; between Ithaca, N. Y., on the one hand, and, on the other, Rochester and Syracuse, N. Y., and Jersey City, N. J.; between Rochester, N. Y., on the one hand, and, on the other, Syracuse, N. Y., and Jersey City, N. J.; between Syracuse, N. Y., and Jersey City, N. J.; between Boston, Mass., and Jersey City, N. J.; from Pittsburgh, Pa., to Rochester, N. Y.; from Waterport, N. Y., to Boston, Mass., Buffalo, N. Y., and Pittsburgh, Pa.

Food products, fresh or frozen, over irregular routes, between Waterport, N. Y., on the one hand, and, on the other, Albany, Elmira and Jamestown, N. Y., Vineland, N. J., and Erie, Pa.; between Boston, Mass., on the one hand, and, on the other, Bridgeton and Vineland, N. J., and Philadelphia, Pa.; between Waterport, N. Y., on the one hand, and, on the other, Bridgeton and Newark, N. J., and Philadelphia, Pa.

No. MC 78725 (Sub No. 3) filed October 28, 1957, RUTH V. BADER, 2540 Jackson Road, Hamilton, Ohio. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 78725, dated August 20, 1942.

Steel strappings, paper products, and *materials* and *supplies* used in the manufacture of paper products, over regular routes, between Chicago, Ill., and Hamilton, Ohio.

Paper and *paper products,* over a regular route, from Hamilton, Ohio, to Chicago, Ill., serving to and from the intermediate points of Hammond, Muncie, and Richmond, Ind., and the off-route points of De Kalb, La Salle, and Peoria, Ill., and those in Illinois, within 30 miles of Chicago.

Paper and *paper products,* over irregular routes, from Hamilton, Ohio, to points in Ohio, those in Illinois on and north of U. S. Highway 40, except Chicago and points in Illinois within 30 miles of Chicago, and De Kalb, La Salle, and Peoria, Ill., those in Indiana on and north of U. S. Highway 40, except Hammond, Muncie, and Richmond, Ind., those in Michigan on and south of Michigan Highway 21, and Milwaukee, Racine, and Beloit, Wis., St. Louis, Mo., Erie, Pa., and Buffalo, Rochester, N. Y.

Paper, over irregular routes, from the above-specified destination points and Toledo, Ohio, to Hamilton, Ohio.

Steel strappings, paper products, and *materials and supplies used in the manufacture of paper products,* over irregular routes, from points in the above-described Ohio and Michigan territory, including Toledo, Ohio, and the above-specified destination points to Hamilton, Ohio.

No. MC 78725 (Sub No. 2), dated March 26, 1943.

Alcoholic malt beverages, over a regular route, between Peoria, Ill., and Dayton, Ohio.

Empty alcoholic malt beverage containers, over a regular route, from Dayton, Ohio, to Peoria, Ill., serving the off-route points of Overpeck, Ohio.

NOTE: The above-described permits, issued in name of predecessor Ralph H. Bader, were acquired pursuant to proceedings in MC-FC 59845; no permits issued transferee to date.

No. MC 79082 (Sub No. 1) filed November 4, 1957, MORRIS COHEN, doing business as M. C. AUTO TRUCKING COMPANY, 210 East 51st Street, Brooklyn, N. Y. Applicant's representative: Charles H. Trayford, 155 East 49th Street, New York, N. Y. For authority to operate as a *common carrier,* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 79082, dated March 17, 1954.

Bakery products, over irregular routes, from New York, N. Y., to points in New Jersey within 25 miles of Columbus Circle, New York, N. Y.

No. MC 83772 (Sub No. 1) filed November 6, 1957, ISAAC LEWIS, JOSEPH LEWIS, ABRAHAM MESTMAN AND HYMAN HOROWITZ, doing business as LEWIS MOTOR SERVICE, 80 Valley Avenue, Newburgh, N. Y. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 83772, dated March 17, 1942.

Cut goods and materials for ladies' and children's garments, over irregular routes, from New York, N. Y. to Newburgh, N. Y.

Ladies' and children's garments, over irregular routes, from Newburgh, N. Y., to New York, N. Y.

Food products and advertising material, used or useful in the sale and distribution of food products, over irregular routes, from New York, N. Y., and Bayonne, N. J., to Newburgh and Poughkeepsie, N. Y.

Deteriorated food products and *empty food product containers,* over irregular routes, from Newburgh and Poughkeepsie, N. Y., to New York, N. Y., and Bayonne, N. J.

No. MC 83930 (Sub No. 2) filed October 30, 1957, THOMAS P. GLAZE, Palace Hotel, Fourth and Central Avenue, Connersville, Ind. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 83930, dated April 1, 1949.

Garden products, cream, ice cream, radios, newspapers, and refrigerators, between Connersville, Ind., and Cincinnati, Ohio, over regular routes.

Newspapers, candy, groceries, florist supplies, dry ice, ice cream containers, cream containers, nails, roofing materials, millwork and supplies used in the manufacture of millwork, radios and refrigerators, from Cincinnati, Ohio, to Connersville, Ind.

Newspapers, to and from Cincinnati, Ohio, and to and from the intermediate and off-route points of New Trenton, Cedar Grove, Brookville, Blooming Grove, Metamora, and Fairfield, Ind.

No. MC 89066 (Sub No. 7) filed October 23, 1957, MAIRS TRANSPORT LTD., 905 Edmonds Street, New Westminster, British Columbia, Canada. Applicant's attorney: J. Stewart Black, 1322 Laburnum Street, Vancouver 9, B. C., Canada. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 89066, dated August 14, 1956.

Fertilizer materials, over irregular routes, from Ports of entry on the United States-Canadian International Boundary line at or near Sumas, Lynden, and Blaine, Wash., to points in Whatcom and Skagit Counties, Wash., with no transportation for compensation on return except as otherwise authorized.

Chicken grits (crushed granite), over irregular routes, from Ports of entry on the United States - Canadian International Boundary line at or near Sumas, Lynden, and Blaine, Wash., to points in Whatcom, and Skagit Counties, Wash., with no transportation for compensation on return except as otherwise authorized.

No. MC 89066 (Sub No. 4), dated December 17, 1953.

Chicken grits (crushed granite), over irregular routes, from Ports of entry on the United States-Canadian boundary at or near Sumas, Lynden, and Blaine, Wash., to points in Whatcom and Skagit Counties, Wash.

Note: Applicant is authorized to conduct *common* carrier operations in Certificate No. MC 94109 dated August 13, 1956.

No. MC 89235 (Sub No. 1) filed October 28, 1957, IRVIN L. SCHAFFER AND AMBROSE W. SCHAFFER, a Partnership, doing business as SCHAFFER BROS. TRUCKING CO., 263 Whittlesey Avenue, Norwalk, Ohio. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 89235, dated October 5, 1951.

Fertilizer and *poultry feed*, over irregular routes, from Cleveland, Ohio, to Fort Wayne, Ind.

Feed and *grain*, from Bellevue, Ohio, to Detroit, Mich. and New Castle, Sharon, and East Springfield, Pa.

No. MC 89238 (Sub No. 12) filed October 30, 1957, ELDON D. AYRES, 640 Canyon, Spearfish, S. Dak. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 89238, dated May 31, 1950.

Petroleum products, in bulk, in tank vehicles, over irregular routes, from Laurel and Billings, Mont., and Osage and Newcastle, Wyo., to Marmath, Rhame, Bowman, Buffalo Springs, Scranton, Gascoyne, Reeder, Bucyrus, Hettinger, Haynes, New England, Regent, Mott, New Leipzig, Elgin, Carson, Lark, Flasher, and Fort Yates, N. Dak., and White Butte, Lemmon, Thunder, Hawk, Keldron, Morristown, Watauga, McIntosh, Walker, McLaughlin, Wakpala, Mobridge, Glenham, Selby, Java, Bowdle, Roscoe, Ipswich, Aberdeen, Cheyenne Agency, Ridgeview, Buffalo, Reva, Sorum, Strool, Bison, Meadow, Shadehill, Coal Springs, Glad Valley, Isabel, Timber Lake, Trail City, Belle Fourche, Newell, Sulphur, Cedar Canyon, Fox Ridge, Edson, Faith, Dupree, Eagle Butte, Mossman, La Plant, Gettysburg, Lebanon, Seneca, Faulkton, Rockham, Redfield, Eureka, Leola, Camp Crook, Pollock, Herreid, and Mound City, S. Dak.

No. MC 89238 (Sub No. 7), dated November 15, 1954, *Petroleum products*, in bulk, in tank vehicles, over irregular routes, from Newcastle, Wyo., to points in that part of North Dakota bounded by a line extending from the Montana-North Dakota State line along U. S. Highway 10 through Beach, Dickinson, Hebron, and Mandan, N. Dak., to the Missouri River (not including points on said highway), thence along the Missouri River to the Montana-North Dakota State line, and thence along the Montana-North Dakota State line to the point of beginning.

No. MC 93476 (Sub No. 3), filed October 23, 1957, LEWIS CARTAGE, LIMITED, 1531 Keel Street, Toronto, Ontario, Canada. Applicant's attorney: Albert J. Tener, Bank of Jamestown Building, Jamestown, N. Y. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 93476, dated May 26, 1950.

Commodities classified as (a) meat, meat products, meat by-products; (b) dairy products; and (c) articles distributed by meat-packing houses, over irregular routes, from the boundary of the United States and Canada at Buffalo and Niagara Falls, N. Y., to points in New York on and west of a line beginning at Port Ontario, N. Y., thence over New York Highway 13 to Vienna, N. Y., thence over New York Highway 49 to Utica, N. Y., thence over New York Highway 8 to Deposit, N. Y., thence over New York Highway 17 to junction U. S. Highway 11 and thence over U. S. Highway 11 to the New York-Pennsylvania State line; those in Pennsylvania on, west and north of a line beginning at Tuna, Pa., thence over U. S. Highway 219 through Bradford, Pa. to Edenburg, Pa., thence over U. S. Highway 22 through Pittsburgh, Pa., to the Ohio-Pennsylvania State Line; and those in Ohio on, north and east of a line beginning at Steubenville, Ohio, thence over U. S. Highway 22 to Cadiz, Ohio, thence over U. S. Highway 250 to Ashland, Ohio, and thence over Ohio Highway 58 to Lorain, Ohio.

No. MC 94963 (Sub No. 2), filed October 31, 1957, GEORGE R. T. ROBERTS, Sabetha, Kans. For authority to operate as a *common carrier* of the same commodities between the same territory as authorized in the following permits:

No. MC 94963, dated June 7, 1941.

Butter and *eggs*, over irregular routes, from Sabetha, Kans., to St. Joseph, Mo., Chicago, Ill., and New York, N. Y.

No. MC 94963 (Sub No. 1), dated September 12, 1946.

Butter, from Sabetha, Kans., to Philadelphia, Pa.

No. MC 95699 (Sub No. 1), filed October 24, 1957, JAMES ALDI, JR., AND NICHOLAS IRVOLINO, doing business as SINGER TRUCKING, 775 River Street, Paterson 4, N. J. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 95699, dated May 7, 1951.

Cut piece goods and *finished products thereof*, made of silk, rayon, acetate, celanese, and mixtures thereof, over irregular routes, between Haledon, N. J., and New York, N. Y.

No. MC 96531 (Sub No. 2) filed November 4, 1957, FUSCO TRUCKING CO., INC., 3138 Webster Avenue, New York 67, N. Y. Applicant's representative: Charles H. Trayford, 155 East 40th Street, New York 16, N. Y. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 96531, dated June 10, 1957.

Baby carriage parts, over a regular route, from Philadelphia, Pa., to New York, N. Y., serving no intermediate points.

Baby carriages, baby furniture, and *juvenile furniture*, uncrated, over a regular route, from New York, N. Y., to Philadelphia, Pa., serving all intermediate points, and the off-route points of Rahway, New Brunswick, Perth Amboy, Plainfield, Passaic, Paterson, Hackensack, and Teaneck, N. J., and points in Essex and Hudson counties, N. J.; from New York, N. Y., to New Haven, Conn., serving all intermediate points.

No. MC 102915 (Sub No. 2), filed October 24, 1957, AXEL LARSON, 119 Coleman Street, Marinette, Wis. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 102915, dated May 28, 1952.

Such merchandise as is dealt in by retail department stores, over irregular routes, subject to "Keystone" restriction, from Marinette, Wis., to points in Wisconsin within 50 miles of Marinette, except Green Bay, Wis.; and *rejected shipments* of the above-specified commodities, on return.

Such merchandise as is dealt in by retail department stores, from such stores or their warehouses in Marinette, Wis. to their customers in Delta, Dickinson, Iron, Marquette, Menominee, and Schoolcraft Counties, Mich.

No. MC 103085 (Sub No. 2), filed November 1, 1957, THOMAS H. COLLINGS, doing business as WESTERLY AUTO TRUCKING SERVICE, 13 Spruce Street, Westerly, R. I. Applicant's attorney: T. H. Collings, Jr. (same address as applicant). For authority to operate as a *common carrier* of the same commodities between the same points of within the same territory as authorized in the following permit:

No. MC 103085 (Sub No. 1), dated July 17, 1942.

Such merchandise as is dealt in by wholesale and retail department stores, over irregular routes, subject to a "Keystone" restriction, from Westerly, R. I., to points in Connecticut within 25 miles of Westerly, R. I.; and *Damaged, rejected, or returned shipments of the above-specified commodities*, on return.

No. MC 103832 (Sub No. 7) filed October 22, 1957, W. A. McELROY, 3513 East Belknap, Fort Worth, Tex. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 103832 (Sub No. 1), dated February 6, 1947.

Asphalt, in bulk, in tank trucks, and in containers, over irregular routes, from Beckett and Wynnewood, Okla., and Princeton, La. to points in Texas within 250 miles of Beckett, Wynnewood, or Princeton; and *rejected shipments* and *empty asphalt containers*, on return.

No. MC 107737 (Sub No. 2), filed November 1, 1957, MELVIN J. ROBINSON, doing business as M. J. ROBINSON TRUCKING CO., Colden, N. Y. Applicant's representative: Raymond A. Richards, 13 Lapham Pk., P. O. Box 25, Webster, N. Y. For authority to operate as a *common carrier* of the commodities between the same points or within the same territory as authorized in the following permits:

No. MC 107737, dated June 24, 1947.

Refractories, crucibles, grinding wheels, refractory cements, and *alloys*, over irregular routes, from the Town of Hamburg, N. Y., to points in Ashtabula, Trumbull, Mahoning, Columbiana, Jefferson, Belmont, Lake, Geauga, Portage, Stark, Carroll, Harrison, Guernsey, Cuyahoga, Lorain, Medina, Summit, Wayne, Ashland, Holmes, Coshocton, Muskingum, and Tuscarawas Counties, Ohio, and in Erie, Crawford, Merder, Lawrence, Beaver, Washington, Greene, Venango, Butler, Warren, Forest, Clarion, Armstrong, Allegheny, Westmoreland, Fayette, McKean, Elk, Jefferson, Clearfield, Indiana, Cambria, Somerset, and Cameron Counties, Pa.

Scrap refractory materials, and *scrap grinding-wheel materials*, on return.

No. MC 107737 (Sub No. 1), dated January 4, 1952.

Refractories, crucibles, grinding wheels, refractory cements and *alloys*, and *abrasive grains*, from the Town of Hamburg, N. Y., to points in the Lower Peninsula of Michigan; *Returned shipments* of the above-specified commodities, *scrap rafractory materials, scrap grinding wheel materials*, and *dunnage*, on return.

No. MC 107781 (Sub No. 2), filed November 8, 1957, CLARENCE H. ZERN, doing business as C. H. ZERN TRANSPORTATION, Gilbertsville, Pa. Applicant's attorney: William J. Wilcox, Commonwealth Building, 512 Hamilton Street, Allentown, Pa. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 107781, dated May 17, 1950.

Iron and steel, and *equipment* used or useful in the erection thereof, over irregular routes, between Pottstown, Pa., on the one hand, and, on the other, points in Massachusetts, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and the District of Columbia.

NOTE: Applicant conducts common carrier operations by virtue of Certificate No. MC 100470 and sub numbers thereunder.

No. MC 108446 (Sub No. 17) (CORRECTION) filed September 30, 1957, published issue November 27, 1957, at page 9502, FISCHBACH TRUCKING CO., a corporation, 921 Sherman Street, Akron, Ohio. Applicant's attorney: Dale C. Dillon, 1825 Jefferson Place NW., Washington, D. C. Previous publication on November 27, 1957, line 41, page 9502, with respect to the present territorial boundary of the authority for *such merchandise* as is manufactured or dealt in by rubber products plants, and, in connection therewith, *equipment, materials*, and *supplies*, used in the conduct of such business, between points in Akron, Ohio, Commercial Zone, on the one hand, and, on the other, points in certain States including a portion of the State of Pennsylvania. The authority in Pennsylvania is from and to those points on and south of *U. S. Highway 22*, and on and east of U. S. Highway 111. Correctly stated, the authority should read: and those *in Pennsylvania on and south of U. S. Highway 22* and on and east of U. S. Highway 111.

No. MC 109447 (Sub No. 1), filed October 24, 1957, REFRIGERATED TRANSIT, INC., 1320 Cass Avenue, St. Louis, Mo. Applicant's attorney: G. M. Rebman, Suite 1230 Boatmen's Bank Building, St. Louis 2, Mo. For authority to operate as a common carrier of the same commodities between the following permit:

No. MC 109447, dated April 11, 1951.

Eggs, dried or frozen, over irregular routes, from Terre Haute, Ind., to Portland, Maine, Manchester, N. H., Boston and New Bedford, Mass., Providence, R. I., Albany and New York, N. Y., Asbury Park, Atlantic City, Belleville, and Newark, N. J., Scranton and Philadelphia, Pa., Baltimore, Md., and Washington, D. C., from National Stockyards, Ill., to Boston, Mass., New York, N. Y., Newark, N. J., Scranton and Philadelphia, Pa., Baltimore, Md., and Washington, D. C.

The commodities classified as (A) meats, meat products, and meat by-products, (B) dairy products, and (C) articles distributed by meat-packing houses, in the appendix to the report in *Modification of Permits of Motor Contract Carriers of Packing House Products*, 48 M. C. C. 628, over irregular routes, subject to "Keystone" restriction, from St. Louis, Mo., to Portland, Maine, Boston and Lawrence, Mass., Providence, R. I., New York, N. Y., Newark, Jersey City, and Camden, N. J., Philadelphia, Pa., Baltimore, Md., and Washington, D. C.

No. MC 109470 (Sub No. 2), filed October 24, 1957, JOSEPH A. CONRAD, doing business as CONRAD TRANSFER COMPANY, 547 North 13th Street, Terre Haute, Ind. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 109470, dated August 24, 1948.

Such merchandise, as is dealt in by mail-order houses and their stores, over irregular routes, subject to a "Keystone" restriction, between Terre Haute, Ind., on the one hand, and, on the other, points in Illinois and Indiana within 50 miles of Terre Haute, Ind.

No. MC 110530 (Sub No. 7), filed November 4, 1957, HUME'S TRANSPORT, LIMITED, 2492 St. Clair Avenue, West, Toronto, Ontario, Canada. Applicant's attorney: Floyd B. Piper, Franklin Street at Mohawk, Buffalo 2, N. Y. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permits:

No. MC 110530 (Sub No. 1), dated November 1, 1950, *Canned or packaged meats, canned or packaged meat products, fresh, salted, cooked, cured or preserved meats, sausage casings, cheese, and dressed poultry*, over irregular routes, from the boundary of the United States and Canada, through ports of entry on the Detroit and St. Clair Rivers, to points in Michigan and to those points in Ohio on and north of U. S. Highway 40 which are also south or west of a line beginning at Steubenville, Ohio, and extending along U. S. Highway 22 to Cadiz, Ohio, thence along U. S. Highway 250 to Ashland, Ohio, and thence along Ohio Highway 58 to Lorain, Ohio, *empty containers* for the above-specified commodities, on return. RESTRICTION: The service authorized herein is restricted to traffic originating in Canada.

No. MC 110530 (Sub No. 3), filed October 23, 1953.

Packing-house products as defined by the Commission, from the boundary of the United States and Canada through the ports of entry on the Detroit and St. Clair Rivers, to points in Ohio south of U. S. Highway 40.

Empty containers for the above-specified commodities, on return.

No. MC 110530 (Sub No. 4), dated September 20, 1955.

Meats, packinghouse products, and *commodities used by meat packinghouses*, as described under A, B, and C of appendix 1 to the report in *Descriptions in Motor Carrier Certificates*, 61 M. C. C. 209, 272, and 61 M. C. C. 766, *frozen foods*, and *fresh fruits and vegetables*, in vehicles equipped with mechanical refrigeration, from Detroit and Port Huron, Mich., to the international boundary between the United States and Canada, at Detroit and Port Huron, respectively, restricted to the transportation of shipments moving to destination points in Canada.

No. MC 111205 (Sub No. 1), filed November 4, 1957, FRED KIRKLAND, R. F. D. No. 1, Murray, Ky. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 111205, dated June 27, 1951.

Sweet cream and *powdered milk*, over irregular routes, from Murray, Ky., to Clarksville, Nashville, Murfreesboro, Knoxville, Jackson, and Memphis, Tenn., Cape Girardeau, Mo., Searcy, Ark., and Metropolis, Du Quoin, Centralia, and

Decatur, Ill., *empty containers,* on return.

No. MC 112441 (Sub No. 1) filed October 23, 1957, MERCHANTS CARTAGE CO., LTD., 649 Industrial Avenue, Vancouver, British Columbia, Canada. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 112441, dated November 8, 1951.

Contractor's and logger's machinery which because of their size or weight require the use of special equipment and *equipment, materials,* and *supplies* moving in connection therewith, over irregular routes, from points in Washington (except Seattle) to ports of entry on that portion of the United States-Canadian Boundary line situated between British Columbia and Washington.

No. MC 113191 (Sub No. 3) filed December 2, 1957, MEYER M. WHITE, doing business as HARTFORD PACKAGE DELIVERY, 23 Branford Street, Hartford, Conn. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 113191 (Sub No. 2) dated January 12, 1953.

Armored steel castings, over irregular routes between Hartford, Conn., and Springfield, Mass.

No. MC 113269 (Sub No. 2) filed November 1, 1957, DANIEL L. PORTANOVA, doing business as THE PORTANOVA TRUCKING COMPANY, 32 Westwood Road, Trumbull, Conn. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 113269 (Sub No. 1), dated March 4, 1953.

Lumber, lumber mill products, and *building woodwork and insulating board* (except as authorized in lumber mill products), over irregular routes, between points in Connecticut, on the one hand, and, on the other, points in Connecticut, Massachusetts, Rhode Island, and those in Westchester, Putnam, and Dutchess Counties, N. Y., and Albany, N. Y.

No. MC 113638 (Sub No. 1), filed October 24, 1957, MARION N. KING AND CHAS. L. KING, JR., doing business as KING BROTHERS, Route No. 5, Hamilton, Ohio. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 113638 dated December 21, 1953.

Malt beverages, over irregular routes, from Milwaukee, Wis., to Hamilton and Cincinnati, Ohio, and *empty malt beverage containers,* on return.

No. MC 114296 (Sub No. 1), filed October 23, 1957, MARY K. HOY, doing business as HOY TRANSFER COMPANY, Route 322 North, State College, Pa. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 114296, dated August 5, 1955.

Paper milk containers, in bundles, over regular routes, from Halethorpe, Md., to State College, Pa., serving no intermediate points.

No. MC 115172 (Sub No. 1), filed November 5, 1957, STRAUB FURNITURE DELIVERY CO., INC., 136 West 55th St., New York, N. Y. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 115172, dated January 17, 1956.

New furniture, uncrated, as defined by the Commission, over irregular routes, *lamps* and *lamp shades,* in retail delivery service only, from New York, N. Y., to points in New Jersey within 50 miles of New York, N. Y.

No. MC 116388 (Sub No. 1) filed October 31, 1957, CLAUDE L. FRANK, Route 2, Westmoreland, Kans. Applicant's attorney: Arthur L. Claussen, 303 New England Building, Topeka, Kans. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 116388, dated July 12, 1957.

Livestock feeds and *poultry feeds,* over irregular routes, from Kansas City, Mo., to the following points in Kansas: those in Morris County (except Council Grove, Delavan, Dwight, Dunlap, Sylvan Park, White City, and Wilsey), those in Wabaunsee County (except Alma, Alta Vista, Eskridge, Harveyville, Maplehill, McFarland, and Paxico), those in Riley County, except Leonardville, Manhattan, Randolph, and Riley), those in Pottawatomie County (except Belvue, Emmett, Olsburg, Onaga, Saint George, Saint Mary's, Wamego, and Wheaton), those in Marshall County (except Axtell, Blue Rapids, Beattie, Frankfort, Marysville, Summerfield, Summit, and Waterville), those in Washington County (except Barnes, Greenleaf, Haddam, Hanover, Linn, Morrowville, Palmer, and Washington), and those in Geary County (except Alida, Brant, Fort Riley, Junction City, Milford, and Ogden).

MOTOR CARRIERS OF PASSENGERS

No. MC 115189 (Sub No. 1), filed October 23, 1957, SAFEWAY TRANSPORT, INC., Box 11, Elm Grove, Wis. For authority to operate as a *common carrier* of the same commodities between the same points or within the same territory as authorized in the following permit:

No. MC 115189, dated February 18, 1957.

Passengers and their baggage in round-trip operations, over irregular routes, restricted to the transportation of boy scouts, girl scouts, school children, their proctors, supervisors, and teachers, beginning and ending at points in Milwaukee, Waukasha, and Ozaukee Counties, Wis., and extending to points in Illinois on and north of U. S. Highway 30.

By the Commission.

[SEAL] HAROLD D. MCCOY,
Secretary.

[F. R. Doc. 57-10418; Filed, Dec. 17, 1957; 8:47 a. m.]

FOURTH SECTION APPLICATIONS FOR RELIEF

DECEMBER 13, 1957.

Protests to the granting of an application must be prepared in accordance with Rule 40 of the general rules of practice (49 CFR 1.40) and filed within 15 days from the date of publication of this notice in the FEDERAL REGISTER.

LONG-AND-SHORT HAUL

FSA No. 34354: *Iron and steel articles to Gulf ports.* Filed by F. C. Kratzmeir, Agent, for interested rail carriers. Rates on iron and steel articles, carloads, for export from points in official territory to Texas Gulf Ports and Lake Charles, La.

Grounds for relief: Port relationship.

Tariff: Supplement 158 to Agent Kratzmeir's tariff I. C. C. 4170.

FSA No. 34355: *Trailership service—Pan-Atlantic S. S. Corp.* Filed by Pan-Atlantic Steamship Corporation (Passco No. 17), for itself and other interested carriers. Rates on freight loaded in highway trailers and transported aboard ship in sea-land service, between eastern, southern, and southwestern points and ports.

Grounds for relief: Rail-ocean, ocean-rail, rail-ocean-rail, and all-rail carrier competition.

Tariffs: Supplement 11 to Pan-Atlantic S. S. Corp. tariff I. C. C. No. 257 and three other tariffs.

FSA No. 34356: *Soda ash from Louisiana and Texas to Jacksonville, Fla.* Filed by F. C. Kratzmeir, Agent (SWFB No. B-7170), for interested rail carriers. Rates on soda ash, carloads from Lake Charles and West Lake Charles, La., Corpus Christi, Freeport, and Velasco, Tex.

Grounds for relief: Motor truck competition.

Tariff: Supplement 275 to Agent Kratzmeir's tariff I. C. C. 4087, and one other tariff.

FSA No. 34358: *Tin or terne plate to Florida.* Filed by O. E. Schultz, Agent (ER No. 2413), for interested rail carriers. Rates on tin or terne plate, in packages or on platforms, carloads from points in Maryland, Ohio, Pennsylvania, and West Virginia to points in Florida.

Grounds for relief: Market competition.

Tariff: Supplement 24 to Agent C. W. Boin's tariff I. C. C. A-1081.

AGGREGATE OF INTERMEDIATES

FSA No. 34357: *Passenger fare—Chicago, Milwaukee, St. Paul and Pacific R. R. Co.* Filed by The Chicago, Milwaukee, St. Paul and Pacific Railroad Company (No. 4). Involving passenger fares, one-way coach and first-class between Chicago, Ill., and points east thereof and basing thereon, on the one hand, and Madison, Wis., and points north and west thereof, on the other.

Grounds for relief: Rail carrier competition.

By the Commission.

HAROLD D. MCCOY,
Secretary.

[F. R. Doc. 57-10417; Filed, Dec. 17, 1957; 8:46 a. m.]

PART II

FEDERAL REGISTER

1934

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Washington, Wednesday, December 18, 1957

TITLE 47—TELECOMMUNICATION

Chapter I—Federal Communications Commission

PART 8—STATIONS ON SHIPBOARD IN THE MARITIME SERVICES

RECAPITULATION OF PART

Because of the number of outstanding amendments to Part 8 since it was last published in the FEDERAL REGISTER (September 16, 1956, 20 F. R. 6862), Part 8 is recapitulated as of December 17, 1957, to read as set forth below.

FEDERAL COMMUNICATIONS COMMISSION,
[SEAL] MARY JANE MORRIS,
Secretary.

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AUTHORITY: §§ 8.1 to 8.804 issued under sec. 4, 48 Stat. 1066, as amended; 47 U. S. C. 154. Interpret or apply sec. 303, 48 Stat. 1082, as amended; 47 U. S. C. 303.

§ 8.1 *Basis and purpose.* (a) The basis for the rules following in this part is the Communications Act of 1934, as amended, and applicable treaties and agreements to which the United States is a party.

(b) The purpose of the rules and regulations in this part is to prescribe the manner in which parts of the radio spectrum may be made available for radiocommunication and radiolocation for maritime operations and for public correspondence which require radio transmitting facilities on board ship and, for certain maritime communications, including public correspondence, on board aircraft; and to prescribe, in so far as is necessary to carry out the provisions of statute and applicable treaties and agreements relative to radio operators and radio installation on board ships for safety purposes, the details as to location, manner of installation, use and availability, of the required equipment, apparatus, spare parts, and such supplementary equipment as may be necessary for the proper functioning of the required shipboard radio installations for the proper conduct of radio communication in time of emergency or distress. For the purposes of this part, the definitions set forth in Subpart A shall be applicable. (For other definitions, refer to Part 2, Frequency Allocations and Radio Treaty Matters; General Rules and Regulations; Part 7, Stations On Land In The Maritime Services; and Part 14, Public Fixed Stations and Stations of the Maritime Services in Alaska.

SUBPART A—DEFINITION OF TERMS

§ 8.2 *General*—(a) *Commission.* The term "Commission" means the Federal Communications Commission.

(b) *Statutes and international agreements*—(1) *Communications Act.* The Communications Act of 1934, as amended.

(2) [Reserved]

(3) *Safety Convention.* The International Convention for the Safety of Life at Sea, 1948, including the Regulations annexed thereto.

(4) *International Radio Regulations.* The Radio Regulations in force annexed to the International Telecommunications Convention, Atlantic City, 1947, as between the Government of the United States and other Contracting Governments; and such preceding international radio regulations as remain in force between the Government of the United States and other Contracting Governments.

(5) *Region 1, Region 2, and Region 3.* Those geographic areas defined as "Region 1", "Region 2", and "Region 3" in Article 5, paragraph 3, of the Radio Regulations of Atlantic City, 1947.

(6) *Great Lakes Agreement.* "Great Lakes Agreement" means the Agreement for the Promotion of Safety on the Great Lakes by Means of Radio and the regulations referred to therein.

NOTE: This Agreement, made by and between the Governments of the United States and Canada, is effective beginning November 13, 1954.

(c) *Telecommunications.* Any transmission, emission or reception of signs, signals, writing, images, and sounds or intelligence of any nature by wire, radio, visual or other electromagnetic systems.

(d) *Radiocommunication.* Any telecommunication by means of Hertzian waves.

(e) *Public correspondence.* Any telecommunication which the offices and stations, by reason of their being at the disposal of the public, must accept for transmission.

(f) *Station.* A separate radio transmitter, or a combination of radio transmitter(s) and radio receiver(s), including the accessory equipment required for carrying on a definite radiocommunication service.

(g) *Station authorization.* Any valid station license or special temporary authority for use of a station, issued by the Commission.

(h) *Person.* An individual, partnership, association, joint stock company, trust, or corporation.

(i) *Station licensee.* The holder of a valid station license.

(j) *Operator licensee.* The holder of a valid license or valid permit for the actual operation of a licensed station.

(k) *Hours of service.* The period of time during each calendar day when a station is used, in conformity with the terms of the station authorization, for the rendition of its normal service.

(l) *Day.* (1) Where the word "day" is applied to the use of a specific frequency assignment or to a specific authorized transmitter-power, such use of the word "day" shall be construed to mean transmission on such frequency assignment or with such authorized transmitter-power during that period of time included between one hour after local sunrise and one hour before local sunset.

(2) Where the word "day" occurs in reference to the provisions of section 353, subsection (c), of the Communications Act or the radio provisions of the Safety Convention, such use of the word "day" shall be construed to mean the calendar day, from midnight to midnight, local ship's time.

(m) *Radio district.* A prescribed geographic area within the United States which, for the purpose of official inspection of radio stations in behalf of the Commission, is under the jurisdiction of a Commission engineer in charge whose official address and the specific area of inspection associated therewith are designated by Appendix I of this part.

(n) *Ship or vessel.* "Ship" or "vessel" includes every description of watercraft or other artificial contrivance, except aircraft, used or capable of being used as a means of transportation on water, whether or not it is actually afloat.

(o) *Categories of ships.* (1) Where use of the term "passenger ship" or "cargo ship" occurs in reference to the provisions of Part II of Title III of the Communications Act, such use of the term shall be construed as follows: A ship is a passenger ship if it carries or is licensed or certificated to carry more than twelve passengers. A cargo ship is any ship not a passenger ship.

(2) Where use of the term "passenger ship" or "cargo ship" occurs in reference to the radio provisions of the Safety Convention or in reference to frequency assignment, such use of the term shall be construed as follows: A ship is a passenger ship if it carries more than twelve passengers. A cargo ship is any ship not a passenger ship.

(3) A "commercial transport vessel" is any ship or vessel which is used primarily in commerce (i) for transporting persons or goods to or from any harbor(s) or port(s) or between places within a harbor or port area, or (ii) in connection with the construction, change in construction, servicing, maintenance, repair, loading, unloading, movement, piloting, or salvaging of any other ship or vessel.

(4) The term "passenger carrying vessel", as used in this part solely in reference to requirements of the Great Lakes Agreement, means any vessel transporting persons for hire.

(p) *Safety Convention Certificates*—(1) *Exemption Certificate.* A certificate issued to a ship which is granted exemption from applicable provisions of the Safety Convention.

(2) *Safety Certificate.* A certificate issued upon application, after inspection and survey by proper authorities, to a passenger ship which complies in an efficient manner with the requirements of the Safety Convention.

(3) *Safety Radiotelegraphy Certificate.* A certificate issued upon application, after inspection by proper authorities, to a cargo ship which complies in an efficient manner with the Safety Convention radio requirements applicable to cargo ships carrying radiotelegraph installations for the purpose of meeting such requirements.

(4) *Safety radiotelephony certificate.* A certificate issued upon application, after inspection by proper authorities, to a cargo ship which complies in an efficient manner with the Safety Convention radio requirements applicable to cargo ships carrying radiotelephone installations for the purpose of meeting such requirements.

(q) *Installed.* As used in this part with respect to the requirements of radio apparatus authorized under the provisions of this part for use on board ship or in stations subject to this part, the term "installed" means installed on board the particular ship or in the particular station to which the pertinent rule or regulation, involving the use of this term, is applied.

(r) *Great Lakes.* This term, as used in this part solely in reference to the Great Lakes Agreement, means all of the Great Lakes, their connecting and tributary waters, and the St. Lawrence River as far east as the lower exit of the Lachine Canal and the Victoria Bridge at Montreal, but shall not include tributary rivers which are not also connecting rivers, and shall not include the Niagara River (including the Black Rock Canal).

(s) *Destination.* In reference to the Great Lakes Agreement this term means a port which a vessel enters for the purpose of initiating or completing the specific activity which characterizes the vessel. For example, with respect to vessels carrying passengers or goods, a port at which a vessel, either partially or completely, loads or unloads passengers or goods, would constitute its destination.

§ 8.3 *Maritime mobile service*—(a) *Mobile service.* A service of radio-communication between mobile and land stations, or between mobile stations.

(b) *Maritime mobile service.* A mobile service between ship stations and coast stations, or between ship stations. (Aircraft stations, when transmitting on frequencies allocated to the maritime mobile service, may communicate in this service with ship stations and coast stations.)

(c) *Mobile station.* A station in a mobile service intended to be used while in motion, or during halts at unspecified points.

(d) *Ship station.* A mobile station in the maritime mobile service located on board a vessel which is not permanently moored.

(e) *Public ship station.* (1) A ship station open to public correspondence.

(2) Public ship stations authorized to employ telegraphy for public correspondence are further classified according to their hours of service for telegraphy as designated herewith:

First Class. These stations carry on a continuous service of public correspondence.

Second Class. These stations carry on a designated service of public correspondence of prescribed but limited duration; at least during the period designated for ship stations of the second category by the International Radio Regulations or, in the case of voyages of short duration, as otherwise designated by the Commission in accordance with those Regulations.

Third Class. These stations carry on a service of public correspondence, the duration of which is prescribed but is less than that of stations of the Second Class, or is not prescribed but is determined by the master of vessel pursuant to his authority under section 358 of the Communications Act.

(f) *Limited ship station.* A ship station not open to public correspondence.

(g) *Marine-utility ship station.* A ship station, readily portable for use as a limited ship station on mobile vessels within a designated local area.

(h) *Marine-utility coast station.* A coast station, readily portable for use as a limited coast station at unspecified points ashore within a designated local area.

(i) *Marine-utility station.* A coast or ship station in the maritime mobile service having a frequency assignment which is available for both marine-utility coast stations and marine-utility ship stations, and licensed under one station authorization to operate as either a marine-utility coast station or a marine-utility ship station according to its location, pursuant to the provisions of paragraphs (g) and (h) of this section, at the time it is being operated.

§ 8.4 *Maritime radiolocation service*—(a) *Radiolocation.* Determination of a position or of a direction by means of the constant velocity or rectilinear propagation properties of Hertzian waves.

(b) *Radiolocation service.* A service involving the use of radio location.

(c) *Maritime radiolocation service.* A radiolocation service intended for the benefit of ships.

(d) *Radiolocation station.* A station in the radiolocation service.

(e) *Radiolocation mobile station.* A station in the radiolocation service intended to be used while in motion or during halts at unspecified points.

(f) *Ship-radiolocation station.* A radiolocation mobile station located on board a ship and used solely for maritime radiolocation service.

(g) *Radionavigation.* Radiolocation intended solely for the determination of position or direction or for obstruction warning, in navigation.

(h) *Radionavigation service.* A radiolocation service involving the use of radionavigation.

(i) *Maritime radionavigation service.* A radionavigation service intended for the benefit of ships.

(j) *Radionavigation station.* A station in the radionavigation service.

(k) *Radionavigation mobile station.* A station in the radionavigation service intended to be used while in motion or during halts at unspecified points.

(l) *Ship-radionavigation station.* A radionavigation mobile station located on board a ship and used solely for maritime radionavigation service.

(m) *Radar.* A radiolocation system where transmission and reception are carried out at the same location, and which utilizes the reflecting or re-transmitting properties of objects in order to determine their positions.

(n) *Primary radar.* Radar using reflection only.

(o) *Secondary radar.* Radar using automatic retransmission on the same or on a different radio frequency.

(p) *Ship-radar station.* A ship-radionavigation station utilizing radar for the purpose of detecting above-water objects, with a determination of their direction and distance from the ship.

NOTE: Where reference is made, in official documents issued by the Commission prior to July 23, 1951, to ship-radar stations in the "ship service", the term "ship service" shall be construed, with respect to such stations, to mean "maritime radionavigation service."

(q) *Radio direction-finding.* Radiolocation in which only the direction of a station is determined by means of its emissions.

(r) *Radio direction-finding station.* A radiolocation station intended to determine only the direction of other stations by means of transmissions from the latter.

(s) *Direction-finder (radio compass).* Apparatus capable of receiving clearly perceptible radio signals and capable of taking bearings on these signals from which the true bearing and direction of the point of origin of such signals with respect to the point of reception may be determined.

(t) *Direction-finder receiver.* A radio receiver which is a component of a radio direction finder.

(u) *Marine radiobeacon station.* A radionavigation land station, the emissions of which are intended to enable a ship station to determine its bearing or its direction in relation to the marine radio beacon station.

(v) *Ship radiolocation-test station.* A ship-radiolocation station used solely for testing maritime radionavigation apparatus incident to its manufacture, installation, repair, servicing, and/or maintenance.

§ 8.5 *Developmental Maritime stations on board ship*—(a) *Developmental mobile station.* A mobile station operated for the express purpose of developing equipment or a technique solely for use only in that portion of the non-government mobile service which has been specifically allocated the authorized frequency (or frequencies) of the developmental mobile station.

(b) *Developmental radiolocation station.* A radiolocation station operated for the express purpose of developing equipment or a technique solely for use only in that portion of the non-government radiolocation service (including the non-government radionavigation service) which has been specifically allocated the authorized frequency (or frequencies) of the developmental radiolocation station.

(c) *Specific classification.* The specific classes of developmental stations on board ships in the maritime mobile service and in the maritime radiolocation service (including maritime radionavigation service) are the same as the classes defined in preceding sections of this part; however, for purposes of identification, the particular class of station is followed by the parenthetical indicator "(developmental)"; for example, "limited ship station (developmental)".

§ 8.6 *Operational*—(a) *Safety communication.* The transmission or reception of distress, alarm, urgent, or safety signals, or any communication preceded by one of these signals, or any form of radiocommunication which, if delayed in transmission or reception, may adversely affect the safety of life or property; and occasional test transmission or reception as necessary for determining whether or not the radio equipment is in good working condition for purposes of safety.

(b) *Superfluous radiocommunication.* Any transmission that is not necessary in properly carrying on the service for which the station is licensed.

(c) *Harmful interference.* Any radiation or any induction which endangers the functioning of a radionavigation service or of a safety service, or obstructs or repeatedly interrupts a radio service operating in accordance with law.

(d) *Distress signal.* (1) The distress signal is the international radiotelegraph or radiotelephone signal which indicates that a ship, aircraft, or other vehicle is threatened by grave and imminent danger and requests immediate assistance.

(2) In radiotelegraphy, the international distress signal consists of the group "three dots, three dashes, three dots", transmitted as a single signal in which the dashes are emphasized so as to be distinguished clearly from the dots.

(3) In radiotelephony, the international distress signal consists of the oral enunciation of the word "MAYDAY", pronounced as the French expression "m'aider".

NOTE: In case of distress, transmission of this particular signal is intended to insure recognition of a radiotelephone distress call by stations of any nationality.

(e) *Alarm signal.* The international radiotelegraph signal, consisting of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between two consecutive dashes being one second, having for its sole purpose the actuation of automatic devices giving warning by means of an alarm that a distress call or message is about to follow, or that an urgent cyclone warning is about to be sent by a coast station authorized to do so.

(f) *Urgency signal.* (1) The urgency signal is the international radiotelegraph or radiotelephone signal which indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft, or other vehicle, or of some person on board or within sight.

(2) In radiotelegraphy, the international urgency signal consists of three repetitions of the group "XXX", sent before the call, with the letters of each group and the successive groups clearly separated from each other.

(3) In radiotelephony, the international urgency signal consists of three repetitions of the word "PAN" pronounced as the French word "panne" and sent before the call.

(g) *Safety signal.* (1) The safety signal is the international radiotelegraph or radiotelephone signal which indicates that the station sending this signal is ready to transmit a message concerning the safety of navigation or giving important meteorological warnings.

(2) In radiotelegraphy, the international safety signal consists of three repetitions of the group "TTT", sent before the call, with the letters of each group and the successive groups clearly separated from each other.

(3) In radiotelephony, the international safety signal consists of three repetitions of the French word "securite", sent before the call.

(h) *Distress traffic.* All messages relative to the immediate assistance required by the ship, aircraft, or other vehicle in distress.

(i) *500 kilocycles silent period.* The three-minute period twice an hour beginning at x h 15 and x h 45, Greenwich mean time (GMT), during which the International Radio Regulations require that all transmissions (except for certain emissions designated in those Regulations) must cease on all frequencies within a designated frequency band centered on 500 kc.

(j) *Watch.* The act of listening for or to sound produced by a telephone receiver when the electric wave energy at audio frequency supplied to the telephone receiver:

(1) Results from simultaneous interception and detection of Hertzian waves of a designated radio frequency or frequencies, and

(2) Is substantially equivalent in frequency to the audio frequency or frequencies generated by detection of the intercepted Hertzian waves.

(k) *Calling.* Transmission from a station solely to secure the attention of another station, or other stations, for a particular purpose.

(l) *Working.* Radiocommunication carried on, for a purpose other than calling, by any station or stations using telegraphy, telephony, or facsimile.

(m) *Operational communication.* Radiocommunication concerning the navigation, movement or management of a ship or ships.

(1) *Navigation.* This includes the piloting of a vessel.

(2) *Movement.* This includes information and necessary communications relative to when and where the boat or ship will move or be moved as, for example, rendezvous at a port, basin, or marina, or for maneuvers during a cruise.

(3) *Management.* This includes the obtaining of necessary supplies for the ship, limited to immediate needs, and the scheduling of repairs or modifications to the ship, limited to communications with those directly involved in the repairs or modifications or concerned with changes in the movement of the ship because of those repairs or modifications.

(n) *Business communication.* Radio communication pertaining to economic, commercial or governmental matters related directly to the purpose for which the ship is being used.

§ 8.7 Technical—(a) *Radio frequency.* Any frequency between 10 kilocycles per second and 3,000,000 megacycles per second.

(b) *Audio frequency.* A frequency corresponding to the frequency of a normally audible sound wave, usually between 20 and 15,000 cycles per second.

(c) *Hertzian waves.* Electromagnetic waves of frequencies between 10 kc and 3,000,000 Mc.

(d) *Emission.* Any radiation of energy by means of Hertzian waves.

(e) *Spurious emission.* Any emission from a station at a frequency or frequencies outside a frequency band of emission authorized for that station.

(f) *Telegraphy.* A system of telecommunication for the transmission of written matter by the use of a signal code.

(g) *Telephony.* A system of telecommunication set up for the transmission of speech, or in some cases, other sounds.

(h) *Facsimile.* A system of telecommunication for the transmission of fixed images with a view to their reception in a permanent form.

(i) *Carrier frequency.* The frequency of the carrier. (For the definition of "carrier", see § 2.1 of this subchapter.)

(j) *Authorized carrier frequency.* A specific carrier frequency authorized for use by a station from which the actual carrier frequency is permitted to deviate, solely because of frequency instability, by an amount not to exceed the frequency tolerance.

(k) *Frequency tolerance.* The extent to which a carrier frequency (or when a carrier is not present, a frequency coinciding with the center of an emission-bandwidth) is permitted by applicable regulations, or by the terms of a station authorization, to depart, solely because of frequency instability, from the authorized carrier frequency (or, when a carrier is not present, from the assigned frequency).

(l) *Frequency-band.* A continuous range of frequencies extending between two designated limiting frequencies.

(m) *Bandwidth.* The number of cycles or kilocycles per second expressing the difference between the limiting frequencies of a frequency-band.

(n) *Radio-channel.* A frequency-band, sufficient in width to permit its use for radiocommunication, comprised of the emission-bandwidth, the interference guard bands, and the frequency tolerance.

(o) *Emission-bandwidth.* The band of frequencies comprising 99 per cent of the total radiated power extended to include any discrete frequency on which the power is at least 0.25 per cent of the total radiated power. (This definition coincides with the definition of "Bandwidth Occupied by an Emission", which appears as paragraph 58 of the International Radio Regulations of Atlantic City, 1947. The emission-bandwidth is dependent upon the class of emission and the speed of signalling.)

(p) *Interference guard bands.* The two frequency-bands additional to, and on either side of, the authorized frequency-band, which may be provided to minimize the possibility of interference between different radio-channels.

(q) *Authorized emission-bandwidth.* A specific emission-bandwidth authorized for use by a station.

(r) *Authorized frequency-band.* A frequency-band authorized for use by a station.

(s) *Assigned frequency.* The frequency coinciding with the center of the frequency-band in which the station is authorized to work; this frequency does not necessarily correspond to any frequency in an emission. (This definition coincides with the definition of "Frequency Assigned to a Station" which appears as paragraph 57 of the International Radio Regulations of Atlantic City, 1947.)

(t) *Frequency assignment.* The specific frequency or frequencies authorized for the emission(s) of a particular station; expressed for each radio-channel by:

(1) The authorized carrier frequency, the frequency tolerance, and the authorized emission-bandwidth in relation to the authorized carrier frequency,

(2) The authorized emission-bandwidth in reference to a specific assigned frequency (when a carrier does not exist), or

(3) The authorized frequency-band (when a carrier does not exist).

(u) *Modulation.* The process of producing a wave some characteristic of which varies as a function of the instantaneous value of another wave, called the modulating wave.

(v) *Modulation factor.* (1) In an amplitude-modulated wave, the ratio of half the difference between the maximum and minimum amplitudes to the average amplitude.

(2) In a frequency-modulated wave, the ratio of the actual frequency swing to the frequency swing defined as 100 percent modulation.

(w) *Percentage modulation.* The modulation factor expressed in percent.

(x) *Amplitude modulation (AM).* Modulation in which the amplitude of a wave is the characteristic subject to variation.

(y) *Frequency modulation (FM).* Modulation in which the instantaneous frequency of a sine-wave carrier is caused to depart from the carrier frequency by an amount proportional to the instantaneous value of the modulating wave.

(z) *Frequency deviation.* In frequency modulation, the peak difference between the instantaneous frequency of the modulated wave and the carrier frequency.

(aa) *Frequency swing.* In frequency modulation, the peak difference between the maximum and the minimum values of the instantaneous frequency.

(bb) *Deviation ratio.* In frequency modulation, for a sinusoidal modulating wave, the ratio of the maximum frequency deviation to the maximum frequency of the modulating wave.

(cc) *Antenna (aerial)*. A means of radiating or intercepting Hertzian waves.

(dd) *Artificial antenna (dummy antenna)*. A device which has the equivalent impedance characteristics of an antenna and the necessary power-handling capabilities, but which does not radiate or intercept Hertzian waves.

(ee) *Last radio stage*. In an electron-tube radio transmitter, the radio-frequency oscillator or power amplifier stage which supplies all radio-frequency power to the antenna, either directly or through the medium of a transmission line.

(ff) *Plate (anode) input power*. The electrical power delivered to the plate (anode) of an electron tube by the source of supply; this power being the product of the indicated anode voltage and the indicated anode current.

(gg) *Antenna power*. The power supplied by a particular radio transmitter to the antenna used in connection with that transmitter, at a radio frequency or frequencies within an authorized frequency-band.

(hh) *Radiated power*. Energy, in the form of Hertzian waves, radiated from an antenna.

(ii) *Authorized transmitter-power*. The power of a particular transmitter as designated in the respective station license or, in lieu thereof, the power designated in the applicable rule(s) or regulation(s). Unless specifically expressed otherwise, this power is the total plate input power to all electron tubes in the last radio stage of the transmitter which are used to supply radio-frequency power to the antenna, without modulation present in the case of a transmitter used for telephony by means of class A3 emission.

(jj) *Frequency band of emission*. A frequency band of emission is a frequency band of which the two designated limiting frequencies are established by an emission-bandwidth referred to a particular carrier frequency. For the purpose of this definition, when a carrier is not present, a frequency normally coinciding with the center of the frequency band occupied by the emission is substituted therefor.

(kk) *Telephone receivers*. Whenever use of the following terms occurs in reference to "watch" as defined in § 8.6 (j), such use of these terms shall be construed as follows:

(1) *Telephone receiver*. Any instrument used to convert energy consisting of electric waves at audio frequency into energy consisting of substantially equivalent sound waves.

(2) *Hand receiver*. A telephone receiver capable of being held to the ear by the hand and normally used in that manner.

(3) *Head receiver*. A telephone receiver capable of being held to the ear by an attached headband or other device and normally used in that manner.

(4) *Loudspeaker*. A telephone receiver capable of effectively radiating acoustic power for reception by ear at a distance and normally used for that purpose.

(ll) *Energize*. The term "energize", as applied in this part to transmitters, receivers, and other component equipment of ship radio installations required for safety purposes, means to supply with power as necessary to provide normal and effective operation of such equipment.

§ 8.8 *Installation for safety communication*—(a) *Main antenna*. An antenna installed in a fixed position on board a ship, and regularly available for use in connection with a main installation on the same ship.

(b) *Main radio transmitter*. A radio transmitter regularly available in a ship station for safety communication which is energized ordinarily by a main power supply.

(c) *Main radio receiver*. A radio receiver regularly available in a ship station for safety communication which is energized ordinarily by a main power supply.

(d) *Main power supply*. A normally available source of power on board a ship capable of simultaneously energizing all other components of the main installation.

(e) *Main installation*. A radio installation on board a ship including a main antenna, a main transmitter, a main receiver, and a main power supply; capable of being used for safety communication with other stations in the maritime mobile service.

(f) *Emergency antenna*. An antenna installed in a fixed position on board a ship, and immediately available for use in connection with (1) an emergency or reserve installation on the same ship, or (2) a main installation on the same ship (if a cargo ship) which complies also with all the requirements of an emergency or reserve installation.

(g) *Emergency radio transmitter*. A radio transmitter immediately available in a ship station for safety communication and capable of being energized by the emergency power supply.

(h) *Emergency radio receiver*. A radio receiver immediately available in a ship station for safety communication and capable of being energized by the emergency power supply.

(i) *Emergency power supply*. An immediately available source or sources of power on board a ship, capable of simultaneously energizing, independently of the propelling power of the ship and any other electrical system, all other components of the emergency or reserve installation.

(j) *Emergency or reserve installation*. A radio installation on board a ship; including an emergency antenna, an emergency radio transmitter, an emergency radio receiver, emergency electric lights, and an emergency power supply; capable of being used when energized solely by its emergency power supply, for safety communication with other stations in the maritime mobile service.

(k) *Automatic alarm receiver*. A complete receiving, selecting, and warning device capable of being actuated automatically by intercepted radio-frequency waves forming the international automatic alarm signal, as this signal is specified by the International Radio Regulations.

(l) *Auto-alarm*. An automatic alarm receiver approved as specified by the provisions of section 3 (x) of the Communications Act.

(m) *Automatic alarm-signal keying device*. A device capable of automatically keying a radiotelegraph transmitter so as to transmit the international automatic-alarm signal, as this signal is specified by the International Radio Regulations.

(n) *"Radiotelephone installation."* The term "radiotelephone installation", as used in this part solely in reference to requirements of the Great Lakes Agreement, means a ship station (including the source of power necessary to energize the apparatus) capable of being used for the effective transmission and reception of speech for the purpose of quickly establishing and effectively carrying on, primarily in time of emergency or distress, radiotelephone communication on the radio-channel of which the authorized carrier frequency is either 2182 kc or 2003 kc; each of these carrier frequencies being readily available for use at all times. Nothing contained in this paragraph shall be construed either to require or to prohibit the availability of other radio-channels by use of this same "radiotelephone installation" for any class of emission or communication authorized by this part on such other radio-channels.

(o) *Existing installation*. The term "existing installation", as used in this part solely in reference to requirements of Part II of Title III of the Communications Act or of the Safety Convention, means an installation installed on a ship prior to November 19, 1952, in the case of a United States ship subject to the radio provisions of the Safety Convention, or one installed on a ship prior to August 13, 1955, in the case of other ships subject to Part II of Title III of said act.

(p) *New installation*. The term "new installation", as used in this part solely in reference to requirements of Part II of Title III of the Communications Act or of the Safety Convention, means an installation which replaces an existing installation or, in the case of a United States ship subject to the radio provisions of the Safety Convention, one installed on a ship subsequent to November 19, 1952, and in the case of other ships subject to Part II of Title III of said act, one which is installed subsequent to August 13, 1955.

SUBPART B—APPLICATIONS

§ 8.21 *Authorization required for operation of a radio station*. Radio stations required by the Communications Act to be licensed shall not be operated in the maritime mobile service or in the maritime radio-location service (including the maritime navigation service) except under and in accordance with a valid station authorization therefor granted by the Commission. Further, the operation of such apparatus shall be in conformity with the provisions of statute, international treaty or agreement, and the rules of the Commission relative to the licensing of operators.

NOTE: The Commission has exempted certain low power radio devices from its general licensing requirements as set forth in Part 15 of this chapter, Restricted Radiation Devices. Licensing procedures and exemptions applicable to radio apparatus used for medical purposes, industrial heating, and other miscellaneous purposes not involving radiocommunication are set forth in Part 18 of this chapter, Industrial, Scientific and Medical Service.

§ 8.22 *Administrative classification of stations.* (a) Stations in the maritime mobile service subject to this part are licensed according to the class of station normally as designated below:

(1) Public ship stations authorized to employ telegraphy for public correspondence:

(i) First class;

(ii) Second class;

(iii) Third class;

(2) Public ship stations not authorized to employ telegraphy for public correspondence;

(3) Limited ship stations;

(4) Marine-utility stations.

(b) Public ship stations not authorized to employ telegraphy for public correspondence are licensed as public ship stations (one class) without distinction relative to hours of service for public correspondence.

(c) Limited ship stations are licensed (one class) without distinction relative to hours of service.

(d) One ship station license is issued in behalf of one station licensee to authorize the operation of a ship station which is within more than one class as enumerated in paragraph (a) of this section. In all such cases, if the station by reason of any portion of its use or operation, comes within the definition of a public ship station (as defined by § 8.3 (e)), it is licensed as a public ship station, if the station is authorized to employ telegraphy for public correspondence, it is further classified in accordance with paragraph (a) (1) of this section.

(e) Stations in the maritime radiolocation service subject to this part (other than those exclusively in the maritime radionavigation service) are licensed according to the class of station, normally as designated below:

(1) Ship radiolocation stations.

(f) Stations in the maritime radionavigation service subject to this part are licensed according to the class of station normally as designated below:

(1) Ship radionavigation stations.

(2) Ship radar stations.

§ 8.23 *Statutory eligibility for station license.* Section 310 of the Communications Act places the following express limitations on the granting and holding of station licenses:

(a) A station license shall not be granted to or held by:

(1) Any alien or the representative of any alien;

(2) Any foreign government or the representative thereof;

(3) Any corporation organized under the laws of any foreign government;

(4) Any corporation of which any officer or director is an alien;

(5) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country;

(6) Any corporation directly or indirectly controlled by any other corporation of which any officer or more than one-fourth of the directors are aliens, if the Commission finds that the public interest will be served by the refusal or revocation of such license; or

(7) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representatives thereof, or by any corporation organized under the laws of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such license.

(8) Nothing in subparagraphs (1) through (7) of this paragraph shall prevent the licensing of radio apparatus on board any vessel, aircraft, or other mobile station of the United States when the installation and use of such apparatus is required by Act of Congress or any treaty to which the United States is a party.

§ 8.24 *Application precedent to authorization.* (a) Except as otherwise provided by §§ 8.26, 8.41, and 8.42, no authorization will be granted for use or operation of any radio station on board ship in any service governed by this part unless formal written application therefor in proper form first is filed with the Commission at its offices in Washington 25, D. C., or pursuant to § 8.35 at a Field Engineering Office of the Commission.

(b) Except as otherwise provided by §§ 8.35, 8.41, and 8.42, an application in writing should be filed at least sixty days prior to the earliest date on which it is desired that the requested authorization be granted by the Commission, in order that action therein may be taken by that date.

(c) Each application shall be specific and complete with regard to the information requested in the application form, or otherwise specifically requested by the Commission. Unless otherwise specified in a particular case or for a particular form, each application shall be filed in original only.

NOTE: Standard forms are prescribed herein for use in connection with the majority of applications submitted for Commission consideration. These forms may be obtained without cost from the Commission at Washington, D. C., or from any of its field offices.

§ 8.25 *Signature on applications.* One copy of each application for an authorization shall be signed under oath or affirmation by the applicant if the applicant be an individual, or any one of the partners if an applicant be a partnership, or by an officer if the applicant be a corporation, or by a member who is an officer if the applicant be an unincorporated association: *Provided, however,* That applications may be signed by the attorney for an applicant (a) in case of physical disability of the applicant, or (b) his absence from the continental United States. If it be made by a person other than the applicant, he must set forth in the verification the grounds of his belief as to all matters not stated upon his knowledge and the reason why it is not made by the applicant. Applications filed on behalf of eligible governmental entities such as states and territories of the United States and political subdivisions thereof, the District of Columbia, and units of local government including incorporated municipalities, shall be signed by such duly elected or appointed officials as may be competent to do so under the law of the jurisdiction. Where more than one copy of an application is required to be filed with the Commission, only the original need to be signed and verified; copies may be conformed.

§ 8.26 *Informal applications.* An application not submitted on a standard form prescribed by the Commission is an informal application. Each informal application shall be submitted in duplicate, normally in letter form, and with the original signed under oath or affirmation. Each application shall be clear and complete within itself as to the facts presented and the action desired.

§ 8.27 *Defective applications.* (a) An application which is not made in accordance with the Commission's rules or other requirements will be considered defective unless accompanied by a request to waive or petition to amend the rule or other requirement with which the application is in conflict. The reasons which are believed to support such a request or petition shall be set forth in detail.

(b) If an applicant is requested by the Commission to file any documents or information not included in the prescribed application form, a failure to comply with such request will constitute a defect in the application.

(c) When an application in written form is considered to be incomplete or defective, the Secretary of the Commission or, in the case of an application for regular ship station license or modification of license filed at a Field Engineering Office of the Commission accompanied by a request for interim ship station license, either the Secretary of the Commission or the Engineer-in-Charge of the particular Engineering Field Office, will return it to the applicant unless the Commission should otherwise direct. The reason for return of the application will be indicated, and, if appropriate, necessary additions or corrections may be suggested.

§ 8.28 *Amendment or dismissal of application.* Any application may be amended or dismissed without prejudice upon request of the applicant prior to the time the application is granted or designated for hearing. Each amendment of, or request for dismissal of an application shall be signed, authenticated, and submitted in the same manner and with the same number of copies as required for the original application. All related correspondence or other material which is to be considered as a part of an application already filed shall be submitted in the form of an amendment to the application concerned.

§ 8.29 *Partial grant of application.* Whenever the Commission, without a hearing grants an application (other than a grant of an interim ship station license) in part, or with any privileges, terms, or conditions other than those requested, the action of the Commission shall be considered as a grant of such application unless the applicant shall, within 20 days from the date on which public announcement of such grant is made, or from its effective date if a later date is specified, file with the Commission a written protest, rejecting the grant as made. Upon receipt of such protest, the Commission will vacate its original action upon the application, if necessary, and set the application for hearing in the same manner as other applications are set for hearing.

§ 8.30 *Request for amendment or waiver of rules.* (a) Any provisions of this part (except these provisions which set forth specific requirements, not subject to waiver or change, of any applicable statute, or any applicable international agreement to which the United States is a signatory party) may be repealed, amended or supplemented, subject to the provisions of the Administrative Procedures Act. Any interested person may petition for issuance, amendment, or repeal of any rule or regulation governing stations in the maritime mobile or maritime radio-location service. Such petition may be filed in relation to specific applications for station authorization, or independently thereof, and shall show the text of the proposed rule(s), and shall set forth the reason(s) in support of the petition.

(b) Any provision of this part (except these provisions which set forth specific requirements, not subject to waiver or change, of any applicable statute, or any applicable international agreement to which the United States is a signatory party) may be waived by the Commission, if the Commission finds that important or exceptional circumstances require such waiver and that the public interest will be served thereby. A request for such waiver may be filed in relation to specific applications for station authorization, or independently thereof, and shall set forth in detail the reason(s) said waiver is considered to be necessary, and how the public interest would be served thereby.

§ 8.31 *Applications concerning marine-utility stations.* Whenever a marine-utility station is to be used and operated at any location on land (whether or not it is to be used and operated additionally on board mobile vessels), such station is subject to the applicable provisions of Part 7 of this subchapter and an application for construction permit to establish such station shall be filed with the Commission, pursuant to the requirements therefor contained in that part.

§ 8.32 *Application for station license.* (a) In accordance with § 8.24 application for station license to authorize the use and operation of radio transmitting apparatus on board ship shall be submitted on the appropriate Federal Communications Commission form as prescribed in § 8.36.

(b) Each application for a public ship station license which requests authority to employ telegraphy for public correspondence shall designate the class of station desired to be authorized, in accordance with the terms of § 8.3 (e).

§ 8.33 *Changes during license term.* When, during the term of a station license (other than an interim ship station license) any change is to be made in respect to the station, or with respect to its use and operation, which would result in a deviation from the terms of the license and/or any supplemental instrument of authorization, application for modification of license on the appropriate FCC form as prescribed in § 8.36 shall, except as otherwise provided by §§ 8.35, 8.41 and 8.42, be submitted in accordance with § 8.24 not less than 60 days prior to the date contemplated for such modification of license in order that action therein may be taken by that date.

§ 8.34 *Renewal of license.* Except as otherwise provided by § 8.42, application for renewal of station license shall be submitted on FCC Form 405-A. Unless otherwise directed by the Commission, each application for renewal of license shall be filed during the last 60 days of the license term. In any case in which the licensee has, in accordance with the Commission's rules made timely and sufficient application for renewal of license, no license with reference to any activity of a continuing nature shall expire until such application shall have been finally determined.

§ 8.35 *Request for interim ship station license.* (a) A formal application for ship station license, or for modification of existing license including modification to cover replacement of radiotelephone transmitting apparatus (but not including renewal of station license), to authorize the use of telephony on board a vessel when accompanied by a request for an interim ship station license, shall be filed in accordance with § 8.36 and presented in person by the applicant or his agent at the nearest Field Engineering Office of the Commission.

(b) Such application as prescribed in paragraph (a) of this section may be filed, without regard to the filing time specified in §§ 8.24 (b) and 8.33 whenever need arises for necessary authority to use a ship station for telephony under the limitations of an interim ship station license on board any vessel pending action by the Commission at Washington, D. C. on the related formal application for regular license or modification of license.

(c) In the event the use of a ship station under the limitations of an interim license would not meet the requirements of an applicant or when an application for renewal of station license is involved, the applicant may, subject to and in accordance with the conditions set forth in § 8.41 or 8.42, whichever is applicable, apply to the Commission at Washington, D. C., for special temporary station authorization or for license or modification or renewal of license in an emergency.

§ 8.36 *Application forms for station authorizations.* (a) The forms hereinafter designated in this section shall be used for filing formal applications for station authorizations:

(1) For new or modified license for all radio transmitting apparatus on board ship:

FCC Form 501.

except that an optional form may be used as follows where no separate FCC Form 501 is filed for other apparatus by the same applicant:

For radiotelephone license to use frequencies solely in the bands 1600–3500 kc, 30–40 Mc and 152–162 Mc: FCC Form 501 or FCC Form 501–A (short form).

(2) For renewal (without modification) of any license for radio station aboard ship:

FCC Form 405–A.

§ 8.37 *Application for consent to voluntary assignment or transfer of control of station license.* (a) Application for consent to voluntary assignment of a license (other than an interim ship station license) covering any class of station governed by this part, or for consent to voluntary transfer of control of a corporation holding such license, shall be filed with the Commission on FCC Form 702, "Application for Consent to Assignment of Radio Station Construction Permit or License", or FCC Form 703, "Application for Consent to Transfer of Control of Corporation Holding Construction Permit or Station License", as the case may be, at least 60 days prior to the contemplated effective date of assignment or transfer of control in order that action thereon may be taken by that date.

(b) In the case of stations on board ship licensed to operate in any service governed by this part, involuntary assignment of licenses will not be made. Upon the death or legal disability of the licensee, such licenses shall be surrendered for cancellation.

§ 8.38 *Applications filed concurrently.* Applications of different category but in respect to the same station and radio service may be filed concurrently by the same applicant as prescribed herewith:

(a) Applications for modification of station license and for renewal of station license;

(b) Applications for modification of station license and for consent to voluntary assignment or transfer of control of station license;

(c) Applications for renewal of station license and for consent to voluntary assignment or transfer of control of station license.

§ 8.39 *One application for plurality of stations.* (a) One application may be filed for several station authorizations to cover similar stations on board different ships: *Provided,* The following elements are the same for all stations covered by such application:

(1) Nature of application (license, modification of license, or special temporary authority);

(2) Applicant;

(3) Licensee (when request is for modification or renewal);

(4) Nature of service and class of station as set forth in § 8.22;

(b) Paragraph (a) of this section shall apply only when the individual stations covered by such application are clearly identified therein and properly related to the information supplied which is applicable to the respective authorization requested for each station.

§ 8.40 *Application for station of portable nature (other than marine-utility station).* (a) Upon application as appropriate under §§ 8.26, 8.36, 8.41 or 8.42 including a supplemental statement as prescribed in subparagraphs (1) and (2) of this paragraph, the Commission may grant a license, modification of license, renewal of license, or special temporary authorization, permitting operation of a station of an established class in the maritime mobile or maritime radiolocation service which is readily portable for use as the occasion requires on board a ship or ships of the United States: *Provided,* The applicant makes a satisfactory showing that:

(1) The station will be operated as an established class of station on board ship in conformity with all applicable rules of the Commission, and

(2) Unusual circumstances exist whereby a station license to cover such operation is necessary to eliminate the necessity of frequently filing applications for special temporary authority, licenses, or modifications of license in order to permit on short notice the temporary operation of specified apparatus on board a designated ship or ships of the United States.

§ 8.41 *Application for special temporary station authorization.* (a) Application for special temporary authority in lieu of or supplemental to normal form of station license for use and operation of radio transmitting apparatus on board ship in the maritime mobile service or the maritime radiolocation service, not involving an emergency found by the Commission, shall be limited to circumstances in which need exists for temporary use, for a limited period of time, of:

(1) Radio transmitting apparatus not currently authorized for the desired operation, or

(2) An authorized station in a manner or at times not permitted by the current station authorization.

(b) In accordance with paragraph (a) of this section written application for special temporary authority for the use and operation of radio transmitting apparatus on board ship may be filed informally as prescribed by § 8.26, except that such application shall be filed not less than 10 days prior to the earliest date of proposed operation unless an acceptable reason for failure to meet this time limitation is included in the application or is otherwise evident to the Commission.

(c) (1) Each application for special temporary authority submitted under the provisions of this section shall contain, as a minimum requirement, the following information:

(i) Name of applicant;

(ii) Name of agent, if application is made by an agent, in cases under § 1.303 of this chapter;

(iii) Official call letters of any valid station authorization or construction permit already held by applicant, and the related station location;

(iv) Name and type of ship;

(v) Official registry number of ship, if available;

(vi) Official call letters or radio call sign, if any, assigned to ship;

(vii) Explanation of need for special temporary authority in lieu of normal form of station license;

(viii) Class of station and nature of service desired;

(ix) Complete particulars concerning purpose and nature of proposed operation;

(x) Specific station(s) or class of station(s), whichever is appropriate, with which communication is intended;

(xi) Frequency assignment, authorized transmitter power, and authorized class or classes of emission desired;

(xii) Equipment to be used, specifying the manufacturer, model number, rated power, and frequency stability to be maintained;

(xiii) The date(s) and time(s) of the proposed operation.

(2) Each application for special temporary authority submitted under the provisions of this section shall, in addition to the information specified in subparagraph (1) of this paragraph, contain such of the following information as is not already on file with the Commission:

(i) Address of applicant;

(ii) Address of agent, if application is made by an agent, in cases under § 1.303 of this chapter.

(iii) Relation of applicant to owner of vessel;

(iv) Factual statements to the extent necessary for the Commission to determine whether or not the granting of the desired authorization will be in accordance with the citizenship requirements of section 310 of the Communications Act.

§ 8.42 *Application for license or modification or renewal of license in an emergency.* (a) In cases of emergency involving danger to life or property or due to damage to equipment wherein the grant of an interim ship station license as provided by § 8.35 is not possible under the provisions thereof or wherein such grant would not satisfy the requirements of the emergency, applications for a station license, or for modification or for renewal of a station license, to authorize certain use and operation of radio transmitting apparatus on board ship in the maritime mobile or maritime radiolocation service in accordance with applicable provisions of treaty, statute, and rules of the Commission, may be filed at any time by unverified telegram or letter, and in the event that the Commission finds that such an emergency exists, temporary authorization may be granted to operate a station in accordance with the unverified request for the duration of such emergency: *Provided,* That in such cases as may be considered necessary by the Commission, the applicant may be required to supplement such application by filing, as soon as practicable thereafter, a verified written application for the same authorization as normally prescribed by applicable provisions of this part.

NOTE: For example, an emergency is found by the Commission when the desired authorization is urgently needed for the use of shipboard radio apparatus for purposes of safety at sea, and circumstances beyond control of the applicant have prevented the filing of a written application, as normally prescribed by applicable provisions of this part, on a date which would assure its receipt by the Commission in time sufficient for the Commission to take appropriate action thereon.

(b) (1) Each application submitted under the provisions of paragraph (a) of this section shall contain, as a minimum requirement, the following information:

(i) Name of applicant;

(ii) Name of agent, if application is made by an agent, in cases under § 1.303 of this chapter;

(iii) Name and type of ship;

(iv) Official registry number of ship, if available;

(v) Official call letters or radio call sign, if any, assigned to ship;

(vi) Class of station desired (not required for renewal, nor for modification unless class of station is to be modified);

(vii) Frequency assignment, authorized transmitter power(s), and authorized class or classes of emission desired (not required for renewal; required for modification only to the extent such information may be involved);

(viii) Equipment to be used, specifying the manufacturer and model number (not required for renewal; required for modification only to the extent such information may be involved)

(ix) Specific station(s) with which communication is desired (not required for renewal; otherwise required only when applicable under the Commission's rules);

(x) Statement of facts which, in the opinion of the applicant, constitute an emergency to be found by the Commission for the purpose of this section, including estimated duration of emergency.

(2) Each application for a station license submitted under the provisions of paragraph (a) of this section shall, in addition to the information specified in subparagraph (1) of this paragraph, contain such of the following information as is not already on file with the Commission:

(i) Address of applicant;

(ii) Address of agent, if application is made by an agent, in cases under § 1.303 of this chapter.

(iii) Relation of applicant to owner of vessel;

(iv) Factual statements to the extent necessary for the Commission to determine whether or not the granting of the desired authorization will be in accordance with the citizenship eligibility requirements of section 310 of the Communications Act.

(c) As provided by and in accordance with the provisions of paragraphs (a) and (b) of this section in respect to applications for a station license or modification or renewal of a station license, applications also may be filed, in cases of emergency involving danger to life or property or due to damage to equipment, for a permit to be issued by cable, telegraph, or radio for the operation of a station on board a ship at sea, and in the event the Commission finds such an emergency exists such permit may be granted to be effective in lieu of a station license until such ship shall return to a port of the continental United States.

§ 8.43 *Application precedent to hearing.* Whenever the Commission regards an application for renewal of license as essential to the proper conduct of a hearing or investigation and specifically directs that the licensee file such application by a certain date, the application shall be filed within the time thus specified. If the licensee fails to file such application within the prescribed time, the hearing or investigation shall proceed as if such renewal application had been received.

§ 8.44 *Failure to prosecute applications.* An applicant not desiring to prosecute his application may request that it be dismissed without prejudice. Where an applicant fails to respond within a reasonable time to official correspondence or request for additional material, the application will be dismissed without prejudice.

§ 8.45 *Inconsistent or conflicting applications.* When an applicant has an application pending or undecided, no other inconsistent or conflicting application filed by the same applicant, his successor or assignee, or on behalf of or for the benefit of said applicant, will be considered by the Commission.

NOTE: §§ 8.46 to 8.49, inclusive, relate only to ship radio installations required by law for safety purposes.

§ 8.46 *Application for inspection.* (a) Pursuant to section 360 (b) of the Communications Act, a ship of the United States which, by reason of the provisions of Part II of Title III of the Communications Act or the radio provisions of the Safety Convention, is required to be fitted with a radio installation for safety purposes, shall, at least once in each 12-month period, be made available by the owner or operating agency of the ship for a detailed inspection of the ship's radio installation. A formal application, FCC Form 801, "Application for Ship Radio Inspection", for such inspection shall be filed with the Commission's engineer in charge at the radio district office nearest the desired port of inspection at least 3 days prior to the date on which such inspection is desired. A service representative (who holds the proper class of radio operator license) of the ship station licensee and (unless otherwise notified by the Commission's representative) sufficient personnel to lower and raise the antenna(s) and to launch any required radio-equipped lifeboat(s), shall be available at the ship at the time inspection is to be conducted. The application for such inspection shall be filed by the shipowner, the ship operating agency, the ship station licensee, or the shipmaster. In the case of passenger ships, such application shall be filed preferably at a time to provide for such inspection coincident with the annual inspection of the vessel by the United States Coast Guard.

(b) Pursuant to section 385 of the Communications Act (and in accordance with § 8.501 (b)), a ship of the United States which, by reason of the provisions of Part III of Title III of the Communications Act is required to be fitted with a radiotelephone installation for safety purposes shall, at least once in each 24-month period, be made available by the owner or operating agency of the ship for a detailed inspection of the ship's radiotelephone installation. A formal application, FCC Form 812, "Application for Periodical Inspection (Title III, Part III of the Communications Act)", for such inspection and issuance of a Communications Act Safety Radiotelephony certificate shall be filed with the Commission's Engineer in Charge of the radio district office nearest the desired port of inspection at least 3 days prior to the date on which such inspection is desired. The application shall be filed by the shipowner, the ship operating agency, the ship station licensee, or the shipmaster.

§ 8.47 *Application for certificate of compliance with Safety Convention.* Whenever a Safety Certificate, Safety Radiotelegraphy Certificate or Safety Radiotelephony Certificate or a modification or renewal thereof, is required by reason of the applicability to a ship of the radio provisions of the Safety Convention, an application, FCC Form 801, "Application for Ship Radio Inspection", for a required inspection of the radio installation on board and issuance of a Safety Radiotelegraphy or Safety Radiotelephony Certificate, or, in the case of a Safety Certificate, certification of the results of such inspection to the United States Coast Guard for issuance of such certificate, shall be filed with the Commission's engineer in charge at the radio district office nearest the desired port of inspection at least 3 days prior to the date on which such inspection is desired. A service representative of the ship station licensee and (unless otherwise notified by the Commission's representative) sufficient personnel to lower and raise antennas and to launch any required radio-equipped lifeboats shall be available at the ship at the time inspection is to be conducted. In the case of radiotelegraph installations, the service representative shall hold at least a radiotelegraph 2d class operator license. In the case of radiotelephone installations, the service representative shall hold a 2d or higher class of operator license, either radiotelephone or radiotelegraph. Such application shall be filed by the shipowner, the ship operating agency, the ship station licensee, or the shipmaster; and, when appropriate, may be combined with the application for annual inspection prescribed by § 8.46.

§ 8.48 *Extra compensation for overtime services by engineers in charge and radio engineers.* (a) Pursuant to section 4 (f) (3) of the Communications Act, engineers in charge and radio engineers of the Field Engineering and Monitoring Bureau of the Federal Communications Commission, who may be required to remain on duty to perform services in connection with the inspection of ship radio equipment and apparatus for the purposes of Part II of Title III of the act or the Great Lakes Agreement at night or on Sundays and holidays, shall receive extra compensation, to be paid by the master, owner, or agent of the vessel, under the following regulations:

(1) The rates of extra compensation are payable in cases where the services of such engineers have been duly requested and they have reported for duty, even though no actual service may be performed.

(2) The extra compensation for overtime services is in addition to the regular compensation paid by the government in the case of engineers whose compensation is fixed on the ordinary per diem basis and those receiving compensation per month or per annum.

(3) Extra compensation for "waiting time" will not be allowed unless and until the engineer actually reports for duty.

(4) For the purpose of computing extra compensation, the word "night" shall mean the time between the established closing hour of one day at the office involved and the established opening hour of the following business day at such office, but shall not include any such time within the 24 hours of a Sunday or holiday. Each Sunday and each holiday shall comprise the 24 hours between midnight and midnight. For the purposes of this section the time between the established closing hour of an office and midnight of the day immediately preceding a Sunday or holiday and the time from midnight until the established opening hour of the day immediately following the said Sunday or holiday will be considered as a single night. The term "holiday" shall include only national holidays, viz. January 1, February 22, May 30, July 4, the first Monday in September, November 11, Thanksgiving Day (when designated by the President), December 25, and such other days as may be designated national holidays by the President or by Congress.

(5) For authorized service in excess of 8 hours on any day excluding Sunday and holidays, extra compensation equivalent to one-half day's pay is payable for each 2 hours or fraction thereof of at least 1 hour that the overtime extends beyond the said 8 hours provided that the overtime is not less than 1 hour. The maximum amount which may be paid for such authorized overtime services on any one day other than on a Sunday or holiday shall not exceed 2½ days' pay.

(6) In computing the amount earned for overtime at the rate of "one-half day's pay for each 2 hours or fraction thereof of at least 1 hour that the overtime extends beyond the established closing hour", one-half day's pay shall be one-half of the gross daily rate of pay; each 2 hours is the time period for the purpose of computation; at least 1 hour means the minimum service in any such 2-hour overtime period for which extra pay may be granted, and each additional period in the amount of 2 hours or fraction thereof of at least 1 hour will entitle the engineer to an additional one-half day's pay. Payment of extra compensation for services consisting of at least 1 hour is authorized from the established closing hour, even though such services may not actually begin until later, provided that the engineer rendering the service remained on duty

after the established closing hour, in which case the time between the established closing hour, and the time of beginning the actual services shall be computed as waiting time. Where the performance of actual service is preceded by such a waiting time there should be an affirmative statement that the engineer was required to remain on duty between the established closing hour and the time of beginning the actual services.

(7) In computing extra compensation where the services rendered are in broken periods, the time served should be combined with the waiting time and computed as continuous service.

(8) The same considerations shall apply when charging for waiting time as govern the charge for services actually rendered. No charge should be made unless after having reported for duty the waiting time amounts to at least 1 hour.

(9) For any authorized services performed on Sundays and holidays, totalling not more than 8 hours, extra compensation is payable equivalent to two days' pay in addition to any regular compensation for such days. For any authorized service in excess of 8 hours (starting either before or after 5 p. m. local time) extra compensation at the rate of one-half day's pay, based on the normal daily rate of pay, for each two hours of service or fraction thereof of not less than 1 hour, is payable in addition to the extra compensation payable for service up to and including 8 hours of service. The maximum extra compensation payable for work on Sundays and holidays is 4½ days' pay.

(10) When engineers are in travel status overtime shall apply the same as at official station. However, compensation for such overtime shall not include travel time.

(11) Assessments and collection of fees against steamship companies for overtime services shall be made even though the payment to employees for such services may not be made until funds are appropriated for that purpose.

(12) An application on a form prescribed by the Commission shall be filed with the office being requested to furnish overtime services before such assignment can be made.

(13) Overtime services shall be billed to the steamship companies as soon as possible after the services have been performed and on collection voucher provided for that purpose. Remittance shall be by postal money order or certified check payable to the "Collector of Customs, Treasury Department" and forwarded to that officer at the port indicated on the voucher, who shall in turn deposit such remittance on a properly designated receipt account.

(14) Protests against the exaction of extra compensation shall be forwarded to the Commission at Washington, D. C., and a copy thereof sent to the office which furnished the overtime services.

§ 8.49 *Application for exemption.* (a) In accordance with the provisions of section 352, subsections (b) and (c), or section 383 of the Communications Act and/or the appropriate provisions of the Safety Convention (Regulations 5 and 6 of Chapter IV of the Regulations annexed to the Safety Convention of 1948) application for exemption from the radio equipment and operator requirements of Part II or Part III of Title III of the said Communications Act and/or the said Safety Convention, or application for modification or renewal of exemption previously granted thereunder, may be made by submitting FCC Form 820, "Application for Exemption", to the Commission at Washington, D. C. In cases of emergency found by the Commission, the Commission may, at its discretion, consider an informal application which should include the full information normally furnished on FCC Form 820.

(b) Whenever exemption from the radio equipment and operator requirements of the Safety Convention is granted in behalf of a cargo ship, the Commission issues an Exemption Certificate. Whenever exemption from such requirements is granted in behalf of a passenger ship, the Commission certifies the necessary particulars to the United States Coast Guard in order that an Exemption Certificate in behalf of that ship may be duly issued.

NOTE: A list of general exemptions is contained in § 8.803.

§ 8.50 *Application for exceptional authority to communicate with amateur stations.* Upon proper application, including a supplemental statement as herein prescribed, the Commission may grant a license, modification of license, renewal of license, or special temporary authorization, permitting a ship telegraph station on board a vessel not engaged in commerce or a vessel used, or intended to be used, for scientific research or expedition, to transmit by means of class A1 or A2 emission on authorized ship telegraph frequencies within the band 2000 kc to 25,000 kc, for the purpose of exchanging radiotelegraph communications directly with licensed amateur stations on land in accordance with the provisions of § 8.70: *Provided*, The applicant includes a supplemental statement satisfactorily showing that:

(a) Unusual circumstances during the contemplated voyage(s) are anticipated which will make direct communication with amateur stations extremely beneficial to persons on board the vessel or to the person(s) responsible for the scientific research or expedition for which the vessel is used or is intended to be used;

(b) The messages to be exchanged with amateur stations will contain no material relating directly or indirectly to a commercial transaction; and

(c) Transmission for this purpose will be conducted on a secondary basis so as to avoid interference to commercial message traffic and other authorized emissions of stations operating in the maritime radiolocation service.

§ 8.51 *Application for periodical survey (Great Lakes Agreement).* For the purpose of obtaining the periodical survey (not less than once every twelve months) as required by Article 11 of the Great Lakes Agreement and certification prescribed by Article 12 thereof, a formal application, FCC Form 809 "Application for Periodical Survey (Great Lakes Agreement)" shall be filed with the Commission's Engineer in Charge at the radio district office nearest the desired place of survey at least 3 days prior to the date such survey is desired. The application for such survey shall be filed by the shipowner, the ship operating agency, the ship station licensee or the shipmaster.

§ 8.52 *Application for exemption (Great Lakes Agreement).* In accordance with the provisions of Article 6 of the Great Lakes Agreement, application for exemption of individual vessels from the provisions of Articles 7, 8, and 9 may be made by submitting FCC Form 820-A "Application for Exemption (Great Lakes Agreement)" to the Commission at Washington, D. C. In cases of emergency found by the Commission, the Commission may consider an informal application which should include the full information normally furnished on FCC Form 820-A.

SUBPART C—STATION AUTHORIZATIONS

§ 8.61 *Authority for distress communication.* No provision of the International Radio Regulations shall prevent a mobile station in distress from using any means available to it for drawing attention, signalling its position, and obtaining help.

§ 8.62 *Changes in equipment of licensed stations.* A licensed transmitter on board ship may be modified without making application to the Commission and without specific authorization from the Commission: *Provided,* (a) the change does not result in operation inconsistent with the rules of the Commission nor with the terms of the outstanding authorization for the station involved; (b) the change does not result in any impairment of the ability of the station licensee or the owner, operating agency, or shipmaster, to comply with any duty or obligation imposed by statute or international treaty or agreement for purposes of safety; (c) a description of the change is incorporated in the next application for renewal or modification of license; and (d) changes in type accepted and type approved equipment are made in accordance with the applicable provisions in Part 2 of this chapter.

§ 8.63 *Effective license periods.* (a) Except as hereinafter provided in other paragraphs of this section, the period of time during which a license is valid for a station on board ship in the maritime mobile or maritime radiolocation service normally shall begin at 3:00 a. m. e. s. t., and normally shall be—

(1) For an initial license, from one to five years from the date on which it becomes effective, the term varying as may be necessary to permit the orderly scheduling of renewal applications;

(2) For a renewal license, four years from the date on which the renewal license becomes effective.

(b) Unless otherwise directed by the Commission, each license, modification of license or renewal of license issued solely on the basis of an application filed in accordance with § 8.42 shall become effective at the time when granted by the Commission and shall expire at a time not beyond the period of the emergency found by the Commission as provided by that section; Provided, that each renewal license granted under the provisions of that section prior to expiration of the license which it will renew, shall become effective only upon expiration of the latter license.

(c) A permit for the operation of a station on board a ship at sea, issued by cable, telegraph, or radio, as the result of an application therefor filed under the provisions of § 8.42 shall become effective at the time when granted by the Commission and shall be effective, in lieu of a station license until such ship first arrives at a port of the continental United States subsequent to the time of issuance of such permit.

(d) A license for a developmental station on board ship shall be issued specifically upon a temporary basis for a period beginning at 3:00 a. m. e. s. t. and not exceeding one year from the date on which it becomes effective.

(e) Each special temporary authorization granted on the basis of an application filed under the provisions of § 8.41 shall be issued specifically upon a temporary basis for a specified period of time designated in such authorization and not extending beyond expiration of the outstanding license of the particular station to which it applies or otherwise not exceeding the normal license term of stations of the particular class and in the particular service designated in such special temporary authorization.

(f) An interim ship station license granted under the provisions of § 8.64 shall become effective when issued at the respective Field Engineering Office of the Commission and shall expire at 3:00 a. m. e. s. t. on a date three months from the date of grant, unless terminated earlier by the Commission pursuant to the provisions of § 8.64.

§ 8.64 *Interim ship station license.* Upon request made in accordance with § 8.35, an interim ship station license may be granted by the Commission at any of its Engineering Field Offices to authorize solely the use of a ship station for telephony in conformity with the conditions and limitations of § 8.369 for an interim period of three months pending action by the Commission at Washington, D. C., on the related formal application for regular ship station license or modification of license filed at such Engineering Field Office as prescribed by §§ 8.35 and 8.36. Unless otherwise directed by the Commission in exceptional circumstances, an interim ship station license shall not be renewed and the authority conferred by such license may be terminated, without hearing, at any time prior to its normal expiration date if, in the discretion of the Commission, the need for such action arises.

§ 8.65 *Issuance of modified and renewed license simultaneously.* When an application is granted by the Commission which necessitates the issuance of a modified station license to become effective less than 60 days prior to the expiration date of the license sought to be modified, and when an application for renewal of said license is granted subsequent or prior thereto, but within 30 days of the date of expiration of the outstanding license, the modified license as well as the renewed license shall be issued as one document in accordance with the combined action of the Commission.

§ 8.66 *One license for plurality of stations.* (a) Unless otherwise determined by the Commission in exceptional circumstances, one station license may be granted to authorize the use and operation of a designated maximum number of stations in the maritime mobile service—normally in multiples of ten stations—on board two or more ships of the United States which do not engage on voyages to any foreign country whenever telephony is the sole type of transmission authorized and the following license elements are the same for each station and the requirements specified in paragraph (b) of this section are fulfilled:

(1) The station licensee;

(2) The conditions which establish and maintain control of the station by the station licensee;

(3) The class of station and nature of service;

(4) The type(s) of transmitting equipment to be authorized (different types of transmitting equipment, which are recognized by the Commission as being equivalent on an engineering basis, shall, for the purpose of this section, be considered as the same type);

(5) The authorized transmitter-power of identical types of transmitting equipment to be authorized;

(6) The frequency assignment and the authorized transmitter-power and class or classes of emission authorized on each radio-channel.

(b) The issuance of one station license as provided in paragraph (a) of this section shall be contingent upon compliance by the applicant and station licensee with the following requirements:

(1) The licensee shall, at the time the application(s) for license is(are) filed and during the entire period in which the station license is valid, keep the Commission at Washington, D. C. and the Commission's engineer in charge of each radio district in which the stations are operated currently informed in writing of the names, registration number and respective classes of ships which are provided with stations authorized in accordance with the terms of the station license;

(2) The transmitting equipment is not installed on board ship for the purpose of complying with the provisions of any statute or international agreement requiring the installation or use of such equipment for safety purposes;

(3) The transmitting equipment shall not be authorized in any other instrument of authorization issued by the Commission.

§ 8.67 *Transfer or assignment of station authorization (see also § 8.37).* Section 310 (b) of the Communications Act expressly provides that a station license granted by the Commission, the frequencies authorized to be used by the licensee, and the rights therein granted shall not be transferred, assigned, or in any manner either voluntarily or involuntarily disposed of, or indirectly by transfer of control of any corporation holding such license, to any person, unless the Commission shall, after securing full information, decide that said transfer is in the public interest, and shall give its consent in writing.

§ 8.68 *Authority for lifeboat radio station.* Whenever, in an application for ship station license, additional radio transmitting equipment described therein is designated as intended for use solely in a lifeboat or other survival craft associated with the principal vessel to which the application applies, operation of such lifeboat radio equipment, for maintenance tests and safety communication only, will be specifically authorized by the ship station license issued in response to that application.

§ 8.69 *Authority for transmission from cable buoy.* Provided the transmitting equipment to be used on a cable marker buoy is adequately described and the necessary technical data is supplied in an application for station license for a ship station on board a cable-repair ship with which the buoy is associated, the use of such transmitting equipment for radiolocation in accordance with § 8.403 will be specifically authorized by the related ship station license.

§ 8.70 *Authority to communicate with amateur stations.* (a) A ship station shall not communicate with or transmit to any amateur station unless it is specifically authorized by the Commission to do so. When authorized to communicate with duly licensed amateur stations, a ship station shall conduct all operation for this purpose in conformity with the relevant terms of its station license and, except as otherwise permitted by the station license, shall, for this purpose,

(1) Transmit by means of A1 or A2 emission only on a frequency between 2000 kc and 25,000 kc authorized for such emission;

(2) Not cause harmful interference to stations in the maritime mobile service nor to stations in the radiolocation service;

(3) Not engage in any communications relating directly or indirectly to a commercial transaction.

(b) Communication with amateur stations of foreign countries shall be limited to communications with such amateur stations as are authorized to communicate with the ship station concerned; in addition, the nature of the communications exchanged with foreign amateur stations shall, in addition to the requirements of paragraph (a) of this section, be in accordance with the International Radio Regulations and in conformity with the regulations of the foreign administration(s) having jurisdiction over the amateur stations(s) involved.

§ 8.71 *Limitations concerning stations of portable nature (other than marine-utility stations).* Advance notice in writing or by telegram shall be given to the Commission and to the engineer in charge of the radio district where the operation is to take place by the licensee of a station of a portable nature (other than a marine-utility station) authorized for use on board ship prior to any operation contemplated on board a particular ship. Such notice shall state the call sign of such station, name of licensee, approximate date(s) of intended operation on board the designated ship, and the geographic area in which the ship is to be navigated. A station of a portable nature, (other than a marine-utility station) authorized to be operated on board a ship or ships, shall not be retained on board any one ship during any continuous period exceeding three months without giving further notice to the Commission and to the engineer in charge of the radio district where the operation is to take place: *Provided*, That the foregoing requirements shall not apply to operation of a station of a portable nature on board small boats (tenders, dories, lifeboats, etc.), which are regularly associated with a parent ship, when such station is specifically identified in the license of such parent ship.

§ 8.72 *Authority for ship-radar station.* Any license issued for a ship-radar station shall be subject to the condition that the station licensee in relation to the proper operation of the station in accordance with the radio law and rules and regulations of the Commission, will be represented on board the radar-equipped vessel by the person who at any given time occupies the position of master.

§ 8.73 *Permanent discontinuance of station operation.* In case of permanent discontinuance of operation of a station on board ship in the maritime mobile service or the maritime radiolocation service, the licensee of that station shall, as soon as possible, return the station license to the Secretary, Federal Communications Commission, Washington 25, D. C., and shall as soon as possible, request by telegram or letter addressed to the Secretary that such license be cancelled. In the event, however, that such license is not available for this purpose, the licensee shall, by telegram or letter, inform the Secretary of that fact stating the reason why the license is not available, and shall request that the license be cancelled. If the station is within the United States, a copy of each telegram or letter sent to the Secretary pursuant to this section shall be forwarded at the same time to the Commission's Engineer in Charge of the radio district in which the station then is located.

§ 8.74 *Assignment of call signs.* (a) Ship stations in the maritime mobile service other than those designated in paragraphs (b), (c), (d) and (e) of this section shall be assigned call signs consisting of four-letter combinations commencing with the letter "K" or the letter "W". (Examples: KBCD or WBDC.)

(b) Ship stations authorized to use telephony (except those specified in paragraph (c) of this section), but not authorized to use telegraphy except secondarily for purposes incidental to the use of telephony, located on board ships whose survival craft being carried, if any, are not authorized to operate radio transmitting equipment, shall be assigned call signs consisting of two-letter, four digit combinations (the digits 0 and 1 may not immediately follow a letter) beginning with WA2000 and progressing numerically through WA9999 and beginning again with WB2000 and progressing thus through the "W" series of prefixes. In cases of vessels having or eligible for signal letters assignable by the United States Treasury Department, the Commission may, if it deems such action necessary or desirable, make exceptions to the foregoing provisions and assign call signs of such character as is legally permissible and as it may deem appropriate in each particular case.

(c) Normally, an individual call sign shall be assigned to each ship (other than survival craft attached to a parent ship) carrying a station licensed in the maritime mobile service, provided that a single call sign shall be assigned to a plurality of stations authorized by one station license in accordance with § 8.66 whenever such stations are easily identified by means other than call signs and their signal of identification or characteristics of emission are published, when required by international agreement, in appropriate international documents.

(d) Stations of lifeboats, liferafts and other survival craft carried aboard ships shall be assigned call signs consisting of the call sign that has been assigned, or that would be assigned, to the ship station located on board that particular parent ship, followed by two digits (the digits 0 and 1 may not immediately follow a letter). (Example: If the call sign that has been assigned, or would be assigned, to a ship station on board a parent ship is KBCD, the survival craft station shall be KBCD followed by two digits, such as KBCD 45.)

(e) Ship-radar stations shall be assigned call signs for administrative purposes only. Such stations located on board ships having a ship station licensed in the maritime mobile service shall be assigned the same call sign as that ship station. If in a particular case the ship has no ship station licensed in the maritime mobile service, the ship-radar station shall be assigned a call sign consisting of a two-letter, four-digit combination (the digits 0 and 1 may not immediately follow a letter) beginning with the letter "W". (Examples: If a ship station licensed in the maritime mobile service with call sign WA2000, or KBCD, or WBCD, the ship-radar station call sign shall be respectively, WA2000, or KBCD, or WBCD. If the ship has no station licensed in the maritime mobile service, the ship-radar station call sign shall be of the type WA2000.) In case of a ship having, or eligible for, signal letters assignable by the United States Treasury Department, the Commission may if it deems such action necessary or desirable, make exceptions to the foregoing provisions and assign a call sign of such character as is legally permissible and as it may deem appropriate in each particular case.

(f) Each station license issued to authorize the use and operation of one or more marine-utility stations shall designate a single call sign consisting of two letters (taken from the group KA through KZ) followed by four digits (the digits 0 and 1 may not immediately follow a letter).

§ 8.75 *Operation during emergency.* (a) The licensee of any ship station or developmental station in the maritime mobile service on board ship, may, during a period of emergency in which the normal communication facilities are disrupted as a result of hurricane, flood, earthquake, or similar disaster, utilize such station for emergency communication service in communicating in a manner other than that specified in the instrument of authorization or in the rules and regulations governing the maritime mobile service: *Provided*, (1) That as soon as possible after the beginning of such emergency use, notice shall be sent to the Commission at Washington 25, D. C., and to the Commission's engineer in charge of the district in which the station is located, stating the nature of the emergency and the emergency use being made of the station; (2) that such emergency use of the station shall be discontinued as soon as substantially normal communication facilities are again available; and (3) the Commission and the engineer in charge be notified immediately when such special use of the station is terminated: *And provided further*, That in no event shall any ship station or developmental station on board ship engage in emergency transmission on frequencies other than, or with power in excess of, that specified in the instrument of authorization or as otherwise expressly provided for by the Commission, or by law: *And provided further*, That the Commission may, at any time, order the discontinuance of any such emergency communication undertaken under this section.

(b) The Commission may authorize the licensee of any radio station governed by this part during a period of national emergency to operate its facilities upon such frequencies, with such power and points of communication, and in such a manner beyond that specified in the station license as may be requested by the Army, Navy, or Air Force.

SUBPART D—GENERAL STATION REQUIREMENTS

§ 8.101 *Inspection of station.* (a) Pursuant to section 303 (n) of the Communications Act, the radio installation on board any ship of United States registry shall be available for inspection by duly authorized representatives of the Commission at any reasonable time and at such frequent intervals as within the discretion of the Commission will insure compliance with applicable regulations, laws, and treaties.

(b) The governments or appropriate administrations of countries, where a ship equipped with a radio station calls, may require the production of the station license for examination. The operator of the station, or the person responsible for the station, must facilitate this examination. The station license must be available so that it can be produced without delay. When the license cannot be produced or when manifest irregularities are observed, governments or administrations may inspect the radio installation in order to satisfy themselves that the installation conforms to the conditions imposed by the International Radio Regulations.

§ 8.102 *Posting of station license.* (a) Except for certain stations to which paragraphs (b) or (c) of this section are applicable, the original license for each station on board ship subject to this part shall be conspicuously posted at the principal location on board at which each such station is operated: *Provided,* That when a ship is fitted with two or more stations authorized by a single license document:

(1) The original license shall be conspicuously posted at the principal operating location of the compulsorily-provided station;

(2) If no station is compulsorily-provided, the original license shall be conspicuously posted at the principal operating location of any station authorized for telephony.

(b) With respect to stations of a portable nature, including marine-utility stations but excluding stations authorized in accordance with § 8.66, where posting of the station license is impracticable, the requirement of paragraph (a) of this section shall not apply: *Provided,* That in lieu thereof the original station license or a photocopy thereof is retained on board the vessel (other than survival craft carried on board a parent ship) during the entire time the station is located thereon.

(c) With respect to a plurality of stations authorized by one station license in accordance with the provisions of § 8.66, the station license shall be retained by the licensee at any location where it is accessible to governmental inspection. In lieu of posting the license on board ship, a Transmitter Identification Card (FCC Form No. 452-C Revised) properly executed shall be affixed to the authorized transmitting equipment on board each ship: *Provided,* That where the transmitting equipment is not visible from the operating position on the ship or is not readily accessible for governmental inspection, the Transmitter Identification Card shall be affixed to the control apparatus at the principal station operating position on board. The following information shall be entered on the Transmitter Identification Card by the station licensee:

(1) Name of station licensee;

(2) Station call sign assigned by the Commission;

(3) Exact location or locations of the actual station license and any station records required by the Commission;

(4) The assigned frequency or frequencies on which the transmitting equipment is authorized to be operated; and

(5) Signature of the licensee, or his duly authorized agent.

(d) Notwithstanding the provisions of paragraphs (a), (b), and (c) of this section, notification by telegram or by letter, in each case by the Secretary of the Commission, stating that the Commission has granted an appropriate station authorization, may be posted in lieu of such authorization if the latter has not yet been received by the station licensee or permittee: *Provided,* That as the result of an official inspection of the station by an authorized representative of the Commission the posting of such notification may not be accepted in lieu of the formal station authorization until additional information pertaining thereto, as may be deemed necessary by that representative for purposes of official inspection, has been obtained from the Commission at Washington, D. C.

§ 8.103 *Location of station.* All components of a station on board ship subject to this part, including the antenna(s), antenna supporting structures, and source(s) of power used to energize the station equipment, shall be located on board the vessel identified in the station license, even though the vessel be temporarily moored. For purposes of communication, no component of a ship station shall be connected by wire line directly or indirectly to any equipment, apparatus, or facilities which are not located entirely on board the vessel identified in the station license: *Provided,* That the limitations of this section shall not apply (a) when the station is being operated in an emergency under the provisions of § 8.75, or (b) when it is necessary, while the ship is temporarily moored, to energize one or more components of a main installation or an emergency installation by means of a source of power not located on board the ship, for the purpose of assuring compliance with any applicable safety radio requirement of law.

§ 8.104 *Operating controls.* (a) In each ship station, operating controls capable of being used to:

(1) Commence and discontinue normal operation of the station;

(2) Change normally from each operating radio-channel to any other associated operating radio-channel in the same characteristic portion of the spectrum; and

(3) Change normally from transmission to reception and vice-versa,

shall be readily available at the principal operating location of the station for instant use by the authorized operator in accordance with the provisions of § 8.154, whenever the station is being used for transmission.

(b) Every ship station using telegraphy shall, when an authorized operator is present at the principal operating location, be capable of change-over from telegraph transmission to telegraph reception and vice-versa within a total period of two seconds under circumstances which do not require a change in operating radio-channel at the same time.

(c) Effective on and after January 1, 1956, every ship station using telephony shall, when an authorized operator is present at the principal operating location, be capable of change-over from telephone transmission to telephone reception and vice-versa within a total period of two seconds under circumstances which do not require a change in operating radio-channel at the same time: *Provided,* That ship stations and marine-utility stations using telephony on any frequency assignment above 30 Mc shall, with respect to operation on such frequencies, comply with this requirement, effective on and after January 1, 1952.

(d) Every ship station shall, during its hours of service and when the authorized operator is present at the principal operating location, be capable of:

(1) Commencing operation within one minute after the need to do so occurs;

(2) Discontinuing all emission within five seconds after emission is no longer required or after the necessity arises for emission to cease.

(e) (1) Subject to the provisions of subparagraph (2) of this paragraph, each ship station using a multi-channel installation for telegraphy (except equipment intended for use only in emergencies on frequencies below 515 kc, or intended for use on any frequency on board lifeboat, liferaft or survival craft exclusively) shall, when the authorized operator is present at the principal operating location, be capable of changing, after the need to do so occurs, from each operating radio-channel to any other operating radio-channel for transmission or reception by means of telegraphy within:

(i) A period of five seconds if the particular radio-channels are within the same characteristic portion of the spectrum or

(ii) A period of fifteen seconds if the particular radio-channels are not within the same characteristic portion of the spectrum.

(2) The requirements of subparagraph (1) of this paragraph shall be effective:

(i) With respect to radio-channels below 515 kc, on and after January 1, 1956; and

(ii) With respect to the specific frequencies in the bands between 4000 kc and 23000 kc authorized by the International Radio Regulations (Atlantic City, 1947) exclusively for the maritime mobile service and radio channels within the frequency band 2065 kc to 2107 kc, on and after January 1, 1955.

(f) Every ship station and marine-utility station using a multi-channel installation for telephony shall, when the authorized operator is present at the principal operating location, be capable of changing, after the need to do so occurs, from one operating radio-channel to another operating radio-channel for transmission or reception by means of telephony within:

(1) A period of five seconds, when changing from the calling channel to a working channel and vice-versa within the frequency-band 1600 kc to 4000 kc; effective on and after January 1, 1962; or

(2) A period of three seconds, when changing from the calling channel to a working channel and vice-versa within the frequency band 156 Mc to 162 Mc.

(g) Whenever the same radio-channel is used for radiotelephone transmission and reception, means shall be provided so that transmission of the carrier wave may be either automatically "voice-controlled" or controlled manually by the person whose speech is being transmitted.

(h) (1) Subject to the provisions of subparagraph (2) of this paragraph, each ship station using telegraphy on frequencies within the band 405 kc to 535 kc must, with respect to the use of any transmitter capable of a plate input power in excess of 450 watts and completed in construction subsequent to January 1, 1952, be provided with an arrangement readily permitting the use of a plate input power for telegraphy which is not in excess of 200 watts. Each such transmitter shall be furnished with a durable nameplate with the month and year of its completion permanently inscribed thereon.

(2) The requirement of subparagraph (1) of this paragraph shall not apply when there is available in the same station a duly authorized radiotelegraph transmitter capable of operation on the international calling frequency 500 kc and at least one working frequency within the band 405 kc to 485 kc, capable of being energized by a source of power other than an emergency power supply installed for compliance with applicable provisions of treaty or statute, and not capable of a plate input power in excess of 450 watts when operated on such frequencies.

§ 8.105 *Required radio-channels for telegraphy.* (a) Each ship station using telegraphy on frequencies within the band 405 kc to 535 kc (except stations on lifeboats or survival craft) shall be capable of transmitting and receiving classes A1 and A2 emission on the radio-channel of which 500 kc is the assigned frequency, and on at least one additional radio-channel within this band which is authorized for working. When a radiotelegraph installation is compulsorily fitted for safety purposes, a third radio-channel which is authorized specifically for direction-finding within this band must be provided also.

(b) Each ship station using telegraphy or frequencies within the band 90 kc to 160 kc shall be capable of transmitting and receiving class A1 emission on the radio-channel of which 143 kc is the assigned frequency, and on at least two additional radio-channels within this band (except within the band 140 kc to 146 kc) which are authorized for working.

(c) Each ship station (except on lifeboats, liferafts and survival craft) using telegraphy on the specific frequencies in the bands between 4000 kc and 23000 kc authorized by the International Radio Regulations (Atlantic City, 1947) exclusively for the maritime mobile service shall, in each of the bands for which facilities are provided to carry on its service, be capable of transmitting and receiving Class A1 emission on at least one radio channel authorized for calling and at least two radio channels authorized for working.

(d) Each ship station using, when in Region 2, telegraphy on frequencies within the band 2065 kc to 2107 kc shall be capable of transmitting and receiving class A1 emission on at least one radio-channel in this band authorized for working in addition to a radio channel in this band authorized for calling.

§ 8.106 *Required radio-channels for telephony.* (a) Each of the following ship stations shall be capable of transmitting and receiving (and shall be licensed to transmit) class A3 emission (modulation by voice frequencies) on the radio-channel of which 2182 kc is the authorized carrier frequency:

(1) Ship stations first licensed after January 1, 1954, for telephony on any radio-channel within the band 1600 kc to 3500 kc; ship stations authorized by license modification granted after January 1, 1954, to use additional or substitute radio apparatus for telephony on any radio-channel within the band 1600 kc to 3500 kc; ship stations authorized by license renewal granted after January 1, 1955, for telephony on any radio-channel within the band 1600 to 3500 kc.

(2) Ship stations licensed for telephony on any radio-channel within the band 1600 kc to 3500 kc, and located on board a ship navigated on the Great Lakes.

(b) Each ship station using telephony on frequencies within the band 1600 kc to 4000 kc which is licensed to transmit on the radio-channel of which 2182 kc is the authorized carrier frequency, shall be capable also of receiving telephony on this channel, and shall be capable also of transmitting and receiving (and shall be licensed to transmit) class A3 emission (modulation by voice frequencies) on at least one other radio-channel authorized for working in this band.

(c) Each ship station, and each marine-utility station when used on board ship (except an experimental or developmental station) which is licensed to transmit by telephony on any radio-channel within the frequency band 156.25 Mc to 157.45 Mc, shall be capable of transmitting and receiving (and shall be licensed to transmit) class F3 emission on the radio-channels of which the authorized carrier frequencies are 156.3 Mc and 156.8 Mc and additionally on at least one radio-channel in this frequency band which is authorized for communication with a coast station or stations: *Provided*, That this requirement shall not apply to marine-utility stations or other stations of a portable nature which are not capable of a plate input power in excess of three watts and are not capable of being readily adjusted for operation on more than one radio-channel. The requirement of this paragraph, in respect to basic type of equipment, may be satisfied by the provision of (1) multi-channel equipment or (2) a plurality of single channel equipments, or (3) a combination thereof, at the option of the station licensee or the applicant for station license.

§ 8.107 *Antenna requirements.* (a) The antenna(s) of each public ship station and of each ship station compulsorily provided on board a vessel for safety purposes pursuant to statute or international agreement shall, insofar as is practicable in each case, have electrical characteristics that will, in conjunction with the particular transmitting apparatus employed, assure good efficiency in the conversion of antenna power to radiated power.

(b) All emission of a ship station, or a marine-utility station on board ship, using telephony on any frequency assignment within the frequency-band 30 Mc to 200 Mc normally shall be polarized vertically at the source when the vessel carrying the station is in a normal vertical plane: *Provided*, The Commission may authorize the use of any other form of polarization in addition to or in lieu of vertical polarization if the applicant or station licensee makes a satisfactory showing that such authorization is necessary for effective communication or reduction of interference and would be beneficial to reception of the emission by other stations in the maritime mobile service.

(c) When a ship station is operating on any carrier frequency below 25 Mc authorized for radiotelephony and the effective operation of the antenna employed is not independent of a ground connection on the frequency in use, the radio station ground system of each such ship station for operation on such frequency shall consist of:

(1) An effective radio ground to the hull for a vessel having a metallic hull, or

(2) In the case of a vessel not having a metallic hull, the most effective radio ground practicable under the circumstances. Preferably the ground shall be to a bare plate or strips, or a combination thereof, of corrosion-resistant metal of at least 12 square feet in aggregate area affixed to the hull below the waterline.

§ 8.108 *Adjustment of equipment.* The transmitting equipment of each station subject to this part shall be operated, tuned, and adjusted so that there will be no radiation of emissions outside the authorized frequency-band that causes harmful interference or is capable of causing harmful interference to the service of any other station. Any spurious emissions, including radio frequency harmonics and audio frequency harmonics, shall be maintained at the lowest practicable level.

§ 8.109 *Measurement of emission frequencies.* (a) The licensee of each station on board ship subject to this part shall be responsible for measurement of each carrier frequency in use by the station as stipulated in paragraphs (b) through (f) of this section: *Provided*, That when a carrier does not exist (except for ship-radar stations) [1] measurement shall be made of the frequency coinciding with the center frequency of the emission-bandwidth, in lieu of measurement of the carrier frequency.

Note: Paragraph 7, Article 28, of the International Radio Regulations (Atlantic City, 1947), which becomes effective when the new International Frequency List becomes effective (as provided by Article 47 of those Regulations), provides that when the ship station transmitter itself cannot be controlled in such a way that its frequency satisfies the tolerance specified in Appendix 3 of those Regulations, the ship station must be provided with a device, having a precision at least equal to one-half of this tolerance, for measuring the frequency of emission. For this purpose, the Commission will accept a master-oscillator of a ship station electron tube transmitter in lieu of the frequency meter prescribed by this international regulation, provided the calibration of the said transmitter and of the circuit as a whole is such as to permit the convenient adjustment of the transmitter to its licensed frequencies within the tolerance for ship stations prescribed by § 8.131.

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[1] The licensee of a ship-radar station shall take the necessary measures to insure that the transmitter operates within the emission limits specified in § 8.133.

(b) Measurement of the carrier frequency shall occur during normal operating conditions, including with and without the application of amplitude modulation if such modulation is employed In the case of a station using frequency modulation, measurement of the carrier frequency shall be made while modulation is not applied.

(c) Measurement of the carrier frequency shall be made by means independent of the carrier frequency determining elements of the transmitting apparatus, and the measuring equipment, shall be capable of revealing deviation in cycles, kilocycles, or megacycles per second (as may be appropriate in each case) from the authorized carrier frequency or the assigned frequency of the station with an accuracy of at least one-half the frequency tolerance authorized by the Commission.

(d) Measurement of the carrier frequency shall, as a minimum requirement, be made at the following times:

(1) When the involved transmitting apparatus is placed in service both initially and on each occasion after it has been removed (other than marine-utility stations and stations of portable nature) physically and temporarily from its place of installation.

(2) As soon as is practicable after any change, replacement, or repair is made of any part of the equipment which determines or affects the frequency of the carrier (including marine-utility stations and stations of portable nature).

(3) As soon as is practicable after the licensee receives an official notice from the Commission that the carrier frequency or the frequency coinciding with the center of the emission-bandwidth has been observed by the Commission to be beyond the frequency tolerance.

(e) Each frequency measurement performed in order to comply with the provisions of this section shall be recorded in the official records of the station. In each instance of measurement the record shall show the location of the transmitter, the location of the measuring equipment, the identity of the transmitter involved, the time and date of measurement, the indicated deviation in cycles, kilocycles, or megacycles per second (as may be appropriate in each case) above or below the authorized carrier frequency or (when a carrier does not exist) above or below the assigned frequency (or other appropriate data in respect to measurement of the frequencies of emission of a ship-radar station) and the signature of the person(s) who made the measurement, together with the name of any measurement service with which such person(s) may be associated for this purpose. Each original record of measurement shall, wherever practicable, be continuously retained in the official records of the station for a period of at least twelve months from the date of measurement, and shall be made available to the Commission upon request or during inspection of the station by an official representative of the Commission. When such retention of these records at the station is deemed by the licensee to be impracticable (such as may be the situation in respect to marine-utility stations and stations of portable nature) the original records shall be retained under jurisdiction of the station licensee at any location in the United States where they can be made readily available for inspection upon request by the Commission or an official representative thereof.

(f) Measurement of frequency required by the provisions of this section may, at the option of the station licensee, be made by any qualified engineering measurement service: *Provided*, That nothing contained in this paragraph shall be construed to change or diminish in any respect the responsibility of the station licensee for proper functioning and operation of the station in accordance with law.

§ 8.110 *Measurement of transmitter-power.* (a) The actual power of each radio transmitter in a ship station, subject to this part, shall be maintained within the following tolerance of the specific power authorized for that transmitter by the Commission:

(1) When the maximum authorized transmitter-power only is indicated, the actual power shall, insofar as is practicable, not be more than that necessary to carry on the service for which the station is licensed and in no event more than 20 per cent above the maximum power authorized;

(2) When the exact authorized transmitter-power is indicated the actual power shall, whenever the transmitter is being operated, be within the limits of 120 per cent and 80 per cent of the authorized power.

(b) For the purpose of assuring adherence to the requirement of paragraph (a) of this section, each radio transmitter in a ship station which is rated by the manufacturer as being capable of a plate input power in excess of 200 watts or an antenna power in excess of 100 watts and completed in construction after July 1, 1952, in a ship station, subject to this part, shall be fitted with the instrument(s) necessary to determine the actual plate power to the transmitter whenever the latter is in use: *Provided*, That on and after July 1, 1956, this requirement shall apply to all such transmitters (including stations of portable nature) rated by the manufacturer with respect to power as set forth in this paragraph.

(c) When the power of a transmitter in a ship station, subject to this part, as rated by the manufacturer, is capable of being more than 120 per cent of the authorized power, the station licensee shall employ an approved procedure to determine that the actual power does not exceed the authorized power. This determination shall be made and the result thereof entered in the licensee's records (which shall be made available to the Commission or an official representative thereof, upon request) as follows:

(1) When the involved transmitting apparatus is placed in service, both initially and on each occasion after it has been removed (other than marine-utility stations and other stations of portable nature) physically and temporarily from its place of installation;

(2) As soon as practicable after any change, replacement, or repair is made of any part of the equipment which determines or affects the actual power (including marine-utility stations and stations of portable nature);

(3) When required by an official representative of the Commission on the basis that the actual power appears, from an official inspection of the station, to exceed the authorized power.

(d) With respect to a transmitter used for telephony by means of class A3 emission, the term "power," as used in paragraphs (a), (b) and (c) of this section, means power without modulation present.

§ 8.111 *Modulation adjustments for telephony.* (a) Ship stations and marine-utility stations using class A3 emission for telephony shall be capable of proper technical operation with peak modulation percentage between 75 and 100 per cent. Insofar as is practicable, the AM transmitting equipment of such stations shall be adjusted so that the transmission of speech normally produces peak modulation percentages within these limits.

(b) Ship stations and marine-utility stations using class F3 emission for telephony shall be capable of proper technical operation with peak modulation percentage as high as is practicable in reference to the frequency swing normally regarded as 100 per cent modulation. In general, the FM transmitting equipment of such stations shall be adjusted so that the transmission of speech normally produces, on this basis, peak modulation percentages between 75 and 100 per cent.

(c) The adjustments required by paragraphs (a) and (b) of this section shall be made and recorded in the licensee's records as follows:

(1) When the involved transmitting apparatus is placed in service, both initially and on each occasion after it has been removed (except for marine-utility stations and other stations of portable nature) physically and temporarily from its place of installation.

(2) As soon as is practicable after any change, replacement, or repair is made of any part of the equipment which determines or affects the percentage modulation (including marine-utility stations and other stations of portable nature).

(3) When required by the Commission on the basis that the percentage modulation observed during an official inspection of the station by an official representative of the Commission appears to not comply with the requirement of paragraph (a) or (b) of this section.

§ 8.112 *General requirements for receiving apparatus.* The radio equipment of each ship station, or marine-utility station, using telegraphy or telephony, must be capable of permitting the reception of the class or classes of emission on the frequency or frequencies, normally received for the service carried on. The technical arrangement of the station apparatus shall be such that the necessary reception of emissions, including in particular that necessary for compliance with the provisions of §§ 8.181 and 8.240, can be readily effected prior to the transmission of any signals or communications by the ship station on the associated transmitting frequency.

§ 8.113 *Installation of power source.* The exact location and physical arrangement on board a vessel of any storage battery, or engine-driven generator and fuel tank, used as a source of power for any component of a licensed radio station subject to this part and located on board such vessel, and the method of ventilating the battery or engine compartment, shall be in accordance with applicable rules or regulations promulgated by the United States Coast Guard. If the Commission finds that such rules or regulations are not complied with by a particular station of this category, an application for license or modification or renewal of license thereafter filed in behalf of that station may be designated by the Commission for hearing to determine whether or not the granting of such application would meet the public interest, convenience or necessity.

NOTE: Inquiries concerning applicable regulations of the Coast Guard may be addressed to The Commandant, United States Coast Guard, Washington, D. C., or to the nearest District Headquarters Office of the Coast Guard.

§ 8.114 *Clock required.* (a) Each ship station licensed to operate on frequencies below 515 kc shall be provided with a reliable clock with a second hand, preferably a sweep second hand. This clock shall be securely mounted in such a position that the second dial can be easily and accurately read by the operator from his normal operating position, from the operating position at which he would ordinarily transmit the international auto-alarm signal by hand, and from the operating position in the radio room used in testing the auto-alarm (if installed) for response to signals from the testing device. Stations which are compulsorily installed on board ship for safety purposes shall, in addition, meet such supplementary requirements for clocks as are prescribed in Subpart R of this part.

(b) Each ship station licensed for operation on frequencies above 1500 kilocycles only, shall, as may be necessary during operation, have available to the operator a suitable timepiece (preferably equipped with a second hand) of sufficient accuracy and reliability to allow for operation of the station in conformity with the terms of its license, regulations of the Commission, and the International Radio Regulations.

§ 8.115 *Retention of radio station logs.* (a) All station logs which are required under those provisions of this part pertaining to the particular classes of stations subject to this part shall be retained by the licensee for a period of one year from date of entry and for such additional periods as required by the following subparagraphs:

(1) Station logs involving communications incident to a distress or disaster shall be retained by the station licensee for a period of 3 years from date of entry;

(2) Station logs which include entries of communications incident to or involved in an investigation by the Commission and concerning which the station licensee has been notified shall be retained by the station licensee until such licensee is specifically authorized in writing by the Commission to destroy them;

(3) Station logs incident to or involved in any claim or complaint of which the station licensee has notice shall be retained by such licensee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for the filing of suits upon such claims.

NOTE: See Parts 45 and 46 of this chapter concerning preservation of records of common carriers.

(b) Station logs shall be made available to an authorized representative of the Commission upon request.

(c) Ship station logs shall be fully completed at the end of each voyage and before the operator(s) (or other person(s) responsible under the applicable provisions of this part) leave the ship. The radio log currently in use shall be kept by the licensed operator(s) of the station or as otherwise authorized by the applicable provisions of this part, and during use shall be located in the principal radio operating room of the vessel. At the conclusion of each ocean voyage terminating at a port of the United States (includes Hawaii, Alaska, Puerto Rico, and Virgin Islands), the original radio log (or a duplicate thereof) dating from the last departure of the vessel from a United States port shall be retained under proper custody on board the vessel for a sufficient period of time (not more than 24 hours) to be available for inspection by duly authorized representatives of the Commission. After retention on board the vessel as herein stipulated, the original log (and the duplicate log if provided) may be filed at an established shore office of the station licensee, and shall be retained as stipulated by paragraph (a) of this section.

NOTE: Duplicate logs are not required by the provisions of this paragraph, unless the original log is removed prior to opportunity for official inspection.

(d) Logs of ships of the United States containing entries required to be made by reason of the Great Lakes Agreement or § 8.368 (c) of this part shall be kept at the principal radiotelephone operating location while the vessel is being navigated. All entries in their original form required by said agreement or § 8.368 (c) shall be retained on board the vessel for a period of not less than one month from the date of entry. After retention on board the vessel as herein stipulated, the entries shall be filed at a place where they will be readily available to an authorized representative of the Commission upon request, and shall be retained as stipulated by paragraph (a) of this section.

SUBPART E—STANDARD TECHNICAL REQUIREMENTS

§ 8.131 *Authorized frequency tolerance.* (a) Unless the particular instrument of authorization specifically provides otherwise, the frequency tolerances authorized for stations on board ships subject to this part shall be as prescribed in paragraphs (b) through (e) of this section.

(b) Authorized frequency tolerances for ship stations operating on frequencies below 515 kc or within the frequency-band 1600 kc to 25000 kc.

Frequency ranges	*Authorized frequency tolerances* *Percent*
(1) From 100 to 515 kc (except for emergency transmitters of the class specified in (2) and (3) below)	0.1
(2) From 100 to 515 kc; emergency transmitters only, whose use is confined solely to safety communication as defined in section 8.6 (a)	.3
(3) 500 kc transmitters intended for use solely in lifeboats or other survival craft	.5
(4) From 1600 to 3500 kc, inclusive (except for lifeboat transmitters under the condition specified below in (5))	.02
(5) For emergency transmitters intended for use solely in lifeboats or other survival craft to be used on the telephone distress frequency 2182 kc or on the telegraph calling frequency 2091 kc	.05
(6) Stations when using frequencies within the band 4000 to 25000 kc:	
For telephony	.005
For other than telephony	.02

(c) Authorized frequency tolerances for ship stations operating on frequencies above 30 Mc and for marine-utility stations:

	Percent
(1) From 30 to 50 Mc:	
For stations licensed to operate with a plate input power not in excess of 3 watts	0.02
For all other stations	.01
(2) From 100 to 200 Mc:	
For stations on survival craft intended for use in emergencies only	.01
For stations licensed to operate with a plate input power not in excess of 3 watts	.01
For all other stations	.005

(d) For stations in the maritime radiolocation service (other than ship-radar stations) the authorized frequency tolerance shall be specified in the instrument of authorization issued in behalf of each station.

(e) The frequency tolerance authorized for ship-radar stations is prescribed as follows: The frequency at which maximum emission occurs shall be within the authorized frequency-band and shall not be closer than 1.5/T megacycles per second to the upper and lower limits of the authorized frequency-band, where "T" is the pulse duration in microseconds.

§ 8.132 *Authorized classes of emission.* (a) When the class of emission is specifically designated in the instrument of authorization, stations on board ship subject to this part shall use emission in conformity with the terms of that document. Otherwise, such stations are authorized to employ classes of emission as follows:

Frequency-band and classes of emission authorized[1]	
(1) Ship stations using telegraphy:	
100 to 160 kc	A1, and for brief testing A0.
160 to 515 kc	A1, A2,[2] A2a,[2] A2b,[2] and for brief testing A0.
2065 to 25,000 kc	A1 and for brief testing A0, except for stations on board survival craft which may use, in addition, class A2 emission.
(2) Ship stations using telephony:	
1600 kc to 30 Mc[3]	A3, A3a, A3b; and for brief operating signals A1, A2, A2a, A2b; also for brief testing A0.
30 Mc to 50 Mc	A3, A3a, A3b, F3; and for brief operating signals A1, A2, A2a, A2b, F1, F2; also for brief testing A0, F0.
152 Mc to 162 Mc	In Regions 1, 2, and 3, F3; and for brief operating signals F1 and F2; also for brief testing F0; additionally in Regions 1 and 3 only, A3, A3a, A3b; and for brief operating signals A1, A2, A2a, A2b; also for brief testing A0.
For other frequencies or frequency-bands.	As designated in the station authorization.
(3) Ship-radar stations:	
Above 3000 Mc	PO.

(4) Stations of any category not designated in subparagraphs (1), (2), and (3) of this paragraph shall use the class or classes of emission specified in the particular station authorization.

[1] The letter "a" following class A2 or A3 emission means the emission of a single sideband, with reduced carrier. The letter "b" following class A2 or A3 emission means the emission of two independent sidebands, with reduced carrier.

[2] Permissible by keying the modulated emission. Keying the modulating audio frequency only, without interruption of the carrier wave, is not permissible. The use of any audio frequency pulse device such as a so-called "chopper" is prohibited except for stations of survival craft.

[3] See § 8.366 (a) (3).

(b) Classes of emission not authorized in paragraph (a) of this section may be authorized by the Commission in special circumstances, subsequent to a satisfactory showing by the applicant of a need therefor and provided harmful interference will not result from the use thereof. Each application requesting such special authorization shall fully describe the emission desired to be used, shall indicate the emission-bandwidth required for effective operation, and shall state the purpose for which such emission is required.

Note: For information regarding the classification of emissions and the calculation of the bandwidth, reference should be made to Part 2 of this chapter.

§ 8.133 *Authorized emission-bandwidths.* (a) When the authorized emission-bandwidth is specifically designated in the instrument of authorization, a station on board ship subject to this part shall use emission-bandwidth(s) in conformity with the terms of that document. Otherwise, such stations shall use emission-bandwidths not exceeding those set forth in this section for the respective classes of emission authorized in § 8.132.

(b) The authorized emission-bandwidths hereinafter designated are established in relation to the operational factors set forth in the following subparagraphs:

(1) Class A0 emission means the incidental radiation of an unmodulated carrier wave from a station which is authorized to use normally an amplitude-modulated wave;

(2) Class A1 emission means a carrier wave (without the use of modulating audio frequency) keyed normally for telegraphy so as to transmit intelligence in the International Morse Code at a speed not exceeding 40 words per minute, with the average word composed of 5 letters;

(3) Class A2 emission means a carrier wave amplitude-modulated at audio frequency not exceeding 1250 cycles per second, the modulated carrier wave being keyed normally for telegraphy so as to transmit intelligence in the International Morse Code at a speed not exceeding 40 words per minute, with the average word composed of 5 letters. (The authorized emission-bandwidths for classes A2, A2a, and A2b emission are designated hereinafter on this basis);

(4) Class A3 emission means a carrier wave amplitude-modulated at audio frequencies corresponding to those necessary for intelligible speech transmitted at conversational speed. (The authorized emission-bandwidths for classes A3, A3a, and A3b emission are designated hereinafter on this basis);

(5) Class F0 emission means the incidental radiation of an unmodulated carrier wave from a station which is authorized to use normally a frequency-modulated wave;

(6) Class F1 emission means a continuous wave (without the use of modulating audio frequency), the frequency of which is alternately shifted between the normal value and another specific value, by keying normally for telegraphy, so as to transmit intelligence in the International Morse Code. The authorized bandwidth for class F1 emission is designated hereinafter on the basis of the bandwidth authorized for class F2 emission;

(7) Class F2 emission means a continuous wave frequency-modulated at such audio frequency and with such deviation ratio as to not exceed the authorized emission-bandwith, the modulating frequency being keyed normally for telegraphy so as to transmit intelligence in the International Morse Code at a speed not exceeding 40 words per minute, with the average word composed of 5 letters;

(8) Class F3 emission means a continuous wave frequency-modulated at audio frequencies corresponding to those necessary for intelligible speech transmitted at conversational speed, with a deviation ratio of any value necessary for effective communication, provided the resulting emission shall not exceed the authorized emission-bandwidth;

(9) The keying of a carrier wave or the amplitude modulation of a carrier wave by means of audio or sub-audible frequency or frequencies, so as to transmit in each instance a selective-signalling code intended to acuate a selective-calling device, shall be construed as class A1 emission or class A2, A2a, or A2b emission, respectively, within the limits of the respective authorized emission-bandwidths hereinafter set forth: *Provided*, That for class A2, A2a, or A2b emission, the frequency of modulation does not exceed 1300 cycles per second on radio-channels authorized for telegraphy, nor 3000 cycles per second on radio-channels authorized for telephony;

(10) The frequency-shift keying of a carrier wave or the frequency-modulation of a carrier wave at audio or sub-audible frequency or frequencies, so as to transmit in each instance a selective signalling code intended to actuate a selective-calling device, shall be construed as class F1 emission or class F2 emission, respectively, within the limits of the respective authorized emission-bandwidths hereinafter set forth: *Provided*, The frequency deviation used, and in the case of class F2 emission the modulating frequency or frequencies used, is (are) such that the emission in fact does not exceed the respective authorized emission-bandwidth;

(11) Class P0 emission means pulse transmission with the absence of any modulation intended to carry information, as used by ship-radar stations licensed by the Commission.

(c) (1) The authorized emission-bandwidths for the classes of emission authorized in § 8.132 shall be as follows:

Class of emission	Emission designator	Emission-bandwidth authorized for transmission of intelligence
A0	None	None.
A1	0.16 A1	224 cycles per second.
A2	2.66 A2	2,724 cycles per second.
A2a	1.33 A2a	1,362 cycles per second.
A2b	2.66 A2b	2,724 cycles per second.
A3	6 A3	8,000 cycles per second.
A3a	3 A3a	4,000 cycles per second.
A3b	6 A3b	8,000 cycles per second.
F0	None	None.
F1:		
For 30 to 50 Mc	Variable [1]	40,000 cycles per second.
For 156.25 to 157.45 Mc	Variable [1]	40,000 cycles per second.
F2:		
For 30 to 50 Mc	36 F2	40,000 cycles per second.
For 156.25 to 157.45 Mc	36 F2	40,000 cycles per second.
F3:		
For 30 to 50 Mc	36 F3	40,000 cycles per second.
For 156.25 to 157.45 Mc	36 F3	40,000 cycles per second.
P0	Variable [2]	Variable.[2]

[1] In the case of class F1 emission, the emission designator will vary according to the frequency deviation, the number of words per minute, and other factors involved.

[2] In the case of class P0 emission, the emission designator and the authorized emission-bandwidth will vary according to the specific values of the controlling technical factors. Reference may be made to individual station authorizations which specify therein the respective emission designator and the respective authorized emission-bandwidth. Note also the provisions of § 8.131 (e) concerning authorized frequency tolerance for radar transmitters.

(2) When a specific "emission designator", as expressed in subparagraph (1) of this paragraph appears in a station authorization applicable to any station subject to this part, such designator specifies, for that station and for the particular radio-channel(s) involved, the corresponding authorized emission-

bandwidth as set forth in subparagraph (1) of this paragraph.

(3) In the actual operation of a ship station, unless otherwise provided by the station authorization:

(i) When a carrier is present, the frequency coinciding with the center of the frequency-band occupied by the emission-bandwidth shall, when class A2, A2b, A3, F2, or F3 emission is being used, be the same as the carrier frequency;

(ii) When a carrier is not present, the frequency-band occupied by the emission-bandwidth shall be within the authorized frequency-band.

(d) Bandwidths in excess of those set forth in paragraph (c) of this section or emission-bandwidths for other classes of emission may be authorized and set forth in the instrument of authorization if approved by the Commission subsequent to a satisfactory showing by the applicant of need therefor. Each application requesting such special authorization shall fully describe the emission desired to be used, shall indicate the emission-bandwidth required for effective operation, and shall state the purpose for which such emission-bandwidth is required.

§ 8.134 *Authorized transmitter-power.* (a) Stations on board ship subject to this part may use such antenna power as is necessary to carry on the service for which the station is licensed, on condition that the maximum authorized transmitter-power shall, subject to the provisions of § 8.110 (a), not be exceeded; and on condition that the minimum authorized transmitter-power shall not be less than that designated in paragraph (c) of this section. Unless the station authorization specifically provides otherwise, the maximum authorized transmitter-power (as defined in § 8.7 (ii)) shall not exceed the particular power set forth in paragraphs (b) through (h) of this section which is applicable under the controlling factors designated therein in direct relation to that power. Unless the station license specifically provides otherwise, the minimum authorized transmitter-power shall not be less than the particular power set forth in paragraph (c) of this section.

(b) For ship stations on board passenger vessels of 5000 gross tons and over, the maximum authorized transmitter-power is set forth as follows:

For telegraphy below 25000 kc: 8000 watts (with or without modulation).

For telephony below 25000 kc:

Class of radio-frequency amplifier used in last radio stage of transmitter	Kaximum authorized transmitter-power in watts (when no modulation is present)			
	2000–4000 kc band, except on U. S. inland waters [1]		4000 to 25000 kc band, except on U. S. inland waters [1]	2000 to 25000 kc band, on U. S. inland waters[1]
	Ship to shore	Ship to ship		
Class C—plate or plate and screen-grid modulated	1,000	150	3,000	150
Class C—control, screen, or suppressor-grid modulated	2,000	300	6,000	300
Class C—cathode modulated	1,600	240	4,800	240
Class B—linear	2,000	300	6,000	300
Class BC—high efficiency	1,200	180	3,600	180
Other classes	As specified in the station authorization			

[1] Means for this purpose the Great Lakes area and the Mississippi River (north of Baton Rouge, La.) and connecting inland waters.

(c) (1) For ship stations on board any category of vessel, other than the class of passenger ship prescribed in paragraph (b) of this section, the maximum authorized transmitter-power is set forth as follows:

For telegraphy below 25000 kc: 2000 watts (with or without modulation).

For telephony below 25000 kc:

Class of radio-frequency amplifier used in last radio stage of transmitter	Maximum authorized transmitter-power in watts (when no modulation is present)			
	2000–4000 kc band, except on U. S. inland waters [1]		4000 to 25000 kc band, except on U. S. inland waters [1]	2000 to 25000 kc band, on U. S. inland waters [1]
	Ship to shore	Ship to ship		
Class C—plate or plate and screen-grid modulated	400	150	1,000	150
Class C—control, screen, or suppressor-grid modulated	800	300	2,000	300
Class C—cathode modulated	640	240	1,600	240
Class B—linear	800	300	2,000	300
Class BC—high efficiency	480	180	1,200	180
Other classes	As specified in the station authorization			

[1] Means for this purpose the Great Lakes area and the Mississippi River (north of Baton Rouge, La.) and connecting inland waters.

(2) For ship stations on board any category of vessel, the authorized transmitter power on and after July 1, 1959, on frequencies between 2000 and 25,000 kc assigned for communication by telephony shall not be less than the power designated in the following table:

Class of radio-frequency amplifier used in last radio stage of transmitter	Minimum authorized transmitter power in watts (when no modulation is present)
Class C—Plate, or plate and screen-grid modulated	15.
Class C—Control, screen, or suppressor-grid modulated	30.
Class C—Cathode modulated	24.
Other classes	Equivalent values as specified in the station authorization.

Provided, however, That the Commission may specifically license the use of authorized transmitter-power less than that specified in the foregoing table, for telephone communication on frequencies within the band 2000 to 4000 kc on condition that the applicant or station licensee shall make a satisfactory showing to the Commission that, with the plate (anode) input power to be used, (see § 8.7 (ff)) a minimum radio frequency field intensity of 7.4 millivolts per meter will be obtained on each such frequency at a distance over sea-water of one statute mile (over fresh water, the minimum radio frequency field intensity is reduced to 4.8 millivolts per meter at one statute mile) from the ship station independent of the direction in which the ship is headed.

(d) For ship stations and marine-utility stations using telephony on any frequency assignment within the frequency-band 35 Mc to 44 Mc and employing amplitude modulation (AM):

Class of radio-frequency amplifier used in last radio stage of transmitter	Maximum authorized transmitter-power (when no modulation is present)	
	Ship stations	Marine-utility stations
Class C—plate, or plate and screen-grid modulated	100 watts	10 watts.
Class C—control, screen, or suppressor-grid modulated	200 watts	20 watts.
Class C—cathode modulated	160 watts	16 watts.
Class B—linear	200 watts	20 watts.
Class BC—high efficiency	120 watts	12 watts.
Other classes	As specified in the station authorization	

(e) For ship stations using telephony on any frequency assignment within the frequency-band 35 Mc to 44 Mc or 156.25 Mc to 157.45 Mc and employing frequency modulation (FM), the maximum authorized transmitter-power (with or without modulation) is 100 watts. For marine-utility stations under the condition prescribed in this paragraph for ship stations, the maximum authorized transmitter-power is 10 watts.

(f) For ship stations and marine-utility stations using telephony in Region 1 or 3, by means of amplitude modulation (AM) on any frequency assignment within the frequency-band 156.25 Mc to 157.45 Mc, the maximum authorized transmitter-power is the same as that designated in paragraph (d) of this section for operation within the band 35 Mc to 44 Mc.

(g) For stations on board ship which are authorized to transmit on frequencies above 157.45 Mc, the power authorized to be used shall be specified in the respective station authorization.

(h) (1) For the purpose of assuring adherence to the requirements of this section or the applicable terms of the station authorization, the authorized transmitter-power, with reference to paragraphs (ff) and (ii) of § 8.7, may be computed for electron-tube transmitters by the method set forth in the following paragraphs: *Provided*, That when the particular transmitter is used for telephony by means of amplitude modulation (class A3 emission and secondarily class A2 or special emission for operating signals) the authorized transmitter-power may be measured when modulation is not present.

(2) The authorized transmitter-power shall be the sum of the product(s) obtained by multiplying the indicated anode (plate) voltage, applied to each electron tube of the last radio stage supplying radio-frequency power to the antenna, by the indicated anode (plate) current flowing through each such tube, or shall be the sum of the indicated powers supplied to each such tube.

(3) Indication of the anode (plate) voltage may be accomplished by means of a direct-current type voltmeter (as applicable) or an alternating current type voltmeter of proper frequency range (as applicable), each such instrument having an accuracy and reliability acceptable to the Commission. Where the same voltage is applied to more than one electron tube, indication of this voltage shall be regarded as indication of the voltage applied to each individual electron tube of that particular group.

(4) Indication of the anode (plate) current may be accomplished by means of a direct-current (d'Arsonval galvanometer movement) type ammeter having an accuracy and reliability acceptable to the Commission. Where the anode (plate) current through more than one electron tube flows through a common point in the electrical circuit, indication of the current at this point shall be regarded as indication of the total anode (plate) current flowing through all electron tubes of that particular group.

(5) Indication of the power in watts supplied to the anode (plate) circuit of one or more electron tubes shall be acceptable: *Provided*, A wattmeter properly activated by the form of voltage and current supplied is employed, and has an accuracy and reliability acceptable to the Commission.

(6) When any current, in addition to the anode (plate) current, flows through an ammeter or wattmeter being used for indications in accordance with this paragraph (such as screen-grid current), such current, unless separately indicated or specified by the manufacturer, shall not be deducted from the current measured for the purpose of this paragraph.

§ 8.135 *Suppression of interference from receiving apparatus.* (a) The use or operation of any radio receiving system or apparatus on board a ship of the United States (excluding lifeboats and other survival craft) shall not, by reason of emission therefrom cause harmful interference to any authorized maritime mobile or maritime radiolocation service or impair the efficiency of any auto-alarm or watch on any radio frequency used for either of these services: *Provided*, That this regulation shall not prevent the use or operation of any radio receiving apparatus or system on board ship when the installation or use thereof is required by act of Congress or any treaty to which the United States is a party unless the Commission finds that the interfering emission from such apparatus or system is capable of:

(1) Creating an electromagnetic field, at a distance over sea water of one nautical mile from the receiver, in excess of the following value(s):

Frequency of interfering emission:	*Field intensity in microvolts per meter*
Below 30 Mc	0.1
30 to 100 Mc	.3
100 to 300 Mc	1.0
Over 300 Mc	3.0

or

(2) Delivering more than the following amounts of power, to an artificial antenna having electrical characteristics designated by the Commission as equivalent to those of the average receiving antenna(s) used on shipboard:

Frequency of interfering emission:	*Power into artificial antenna in micromicrowatts*
Below 30 Mc	400
30 to 100 Mc	4,000
100 to 300 Mc	40,000
Above 300 Mc	400,000

(b) Any specifically identified type of radio receiving apparatus or system required to be installed or used on board a ship by act of Congress or any treaty to which the United States is a party shall be exempt from any subsequent finding by the Commission pursuant to paragraph (a) (1) and (2) of this section if the Commission, as a result of engineering measurements made relative to emission produced by such type of apparatus or system, finds that such emission, as developed on frequencies to which the provisions of paragraph (a) of this section apply under conditions equivalent to normal use or operation on board ship, is not in excess of the value(s) specified in paragraph (a) (1) and/or (2) of this section.

§ 8.136 *Spurious emission limitations.* (a) Spurious emissions originating in transmitters authorized under this part are subject to the limitations set forth in paragraph (b) of this section, which limitations shall be applicable in accordance with paragraphs (c), (d) and (e) of this section.

(b) The power of any spurious emission shall be reduced below the power of the carrier in accordance with the following schedule:

(1) On any frequency removed from the center of the authorized frequency band of emission by between 50 per cent and 100 per cent of the authorized emission bandwidth: at least 25 decibels;

(2) On any frequency removed from the center of the authorized frequency band of emission by between 100 per cent and 250 per cent of the authorized emission bandwidth: at least 35 decibels;

(3) On any frequency removed from the center of the authorized frequency band of emission by more than 250 per cent of the authorized emission bandwidth: by at least the number of decibels equal to $40+10 \log_{10} P$, where P is the maximum "authorized transmitter power" in watts as such power is specifically defined in § 8.7 (ii) without applying the power tolerance prescribed in § 8.110 (a).

(c) Except as outlined in paragraph (d) of this section, the requirements of paragraph (b) of this section shall be applicable as follows:

(1) To any radio transmitter for which type acceptance is requested.

(2) To radio transmitters when operating on any frequency assignment between 30 Mc and 500 Mc.

(3) After June 1, 1958, to any radio transmitter when operating on any frequency below 30 Mc.

(d) The requirements of paragraph (b) of this section shall not apply to:

(1) Lifeboat transmitters;

(2) Transmitters authorized in developmental station licenses;

(3) Radiotelegraph transmitters licensed for operation on any frequency assignment below 30 Mc prior to June 1, 1958, which are authorized in a station license issued to the same licensee or for a station on board the same vessel;

(4) Other radio transmitters licensed for operation on any frequency assignment below 30 Mc prior to June 1, 1958, which are authorized in a station license issued to the same licensee or for a station on board the same vessel until they are authorized in a new or renewed station license issued in response to an application filed after June 1, 1963.

(e) When an emission outside of the authorized emission bandwidth causes harmful interference to an authorized service the Commission may require more attenuation of such emission than specified in paragraph (b) of this section.

§ 8.137 *Special requirements for radiotelephone transmitters.* (a) In order to be type accepted each radiotelephone transmitter shall automatically prevent modulation in excess of 100 percent. This requirement, however, shall not apply to transmitters licensed for an authorized transmitter power not exceeding three watts. In the event the operation of any licensed radiotelephone transmitter causes harmful interference to any authorized radio service by reason of excessive modulation, the Commission may, in its discretion, require that the use of such transmitter be discontinued until it will automatically prevent modulation in excess of 100 per cent.

(b) Each radiotelephone transmitter of a ship station or a marine-utility station shall be type accepted by the Commission prior to its operation by any unlicensed person pursuant to the provisions of § 8.155 (a). In addition to complying with all other applicable rules and regulations such a transmitter shall meet the following requirements:

(1) Operation of the transmitter shall require only the use of simple external switching devices excluding all manual adjustment of radio frequency determining elements;

(2) The required radio frequency stability of the transmitter must be maintained (at all times during such operation by an unlicensed person) by the transmitter itself;

(3) None of the operations necessary to be performed during the course of normal rendition of service to the station shall be capable of causing any radiation of emission on an unauthorized frequency; and

(4) The transmitter shall automatically prevent modulation in excess of 100 per cent.

(c) The frequency deviation of each radiotelephone transmitter authorized in a ship station or marine utility station license (other than transmitters authorized solely for developmental stations) shall, with 100 per cent modulation applied, not exceed 15 kc when the transmitter is radiating class F1, F2 or F3 emission on any marine radiochannel within the frequency band 35 to 44 Mc, or within the frequency band 156.25 to 157.45 Mc.

§ 8.138 *Special requirements for ship-radar transmitters.* (a) Each radar transmitter authorized in a ship-radar station (other than in a developmental station) must be type-approved by the Commission, pursuant to the type approval procedure set forth in Part 2 of this chapter. In addition to meeting all other applicable requirements such transmitters shall comply with the limitations and conditions set forth in the following paragraphs.

(b) (1) The design and construction of the radar transmitter shall be such that, when properly installed, its use will not produce harmful interference to any other radiolocation service or any maritime mobile service;

(2) The radar transmitter shall not have means available for any external adjustment which can result in a deviation from the terms of the station authorization or any deviation from the applicable technical requirements for ship-radar stations stipulated in this part.

§ 8.139 *Acceptability of radiotelephone transmitters for licensing.* (a) Each radiotelephone transmitter authorized in a ship station or marine-utility station license (other than transmitters authorized solely for developmental stations) must be type accepted by the Commission. This requirement shall be applicable as follows:

(1) To transmitters when operating on any frequency assignment above 30 Mc;

(2) After June 1, 1958 to transmitters when operating on any frequency assignment, including any assignment below 30 Mc. However, until requested to be authorized in a new or renewal license issued in response to an application filed after June 1, 1963, transmitters licensed under this part prior to June 1, 1958 may (insofar as this requirement is concerned) continue to be authorized for operation on any frequency assignment below 30 Mc if authorized in a station license issued to the same licensee or for a station on board the same vessel.

§ 8.140 *Type acceptance of equipment.* (a) Any manufacturer of a radio transmitter intended for use or used in ship stations or marine-utility stations may request type acceptance for such transmitters by following the type acceptance procedure set forth in Part 2 of this chapter.

(b) Type acceptance of a radio transmitter may be requested also by an applicant for a station authorization by following the type acceptance procedure set forth in Part 2 of this chapter. Such transmitters, if type accepted, are not normally included on the Commission's "Radio Equipment List, Part C", but are individually enumerated on the respective authorization.

NOTE: Additional rules with respect to type acceptance are set forth in Part 2 of this chapter. Those rules include information with respect to withdrawal of type acceptance, modification of type accepted equipment and limitations on the finding upon which type acceptance is based.

From time to time, the Commission will make public a list of equipment entitled "Radio Equipment List, Part C". Copies of this list are available for inspection at the Commission's offices in Washington, D. C. and at each of its field offices. This list will, with the exception set forth in paragraph (b) of this section, include equipment type approved and type accepted under this part.

SUBPART F—OPERATOR REQUIREMENTS

§ 8.151 *Authorized operator required.* (a) Except as otherwise provided in § 8.155, the actual operation of all transmitting apparatus in any radio station in the maritime mobile or maritime radiolocation service on board a ship of the United States shall be carried on only by a person holding an operator license issued by the Commission in accordance with Part 13 of this chapter.

(b) When the station is a public ship station used for telephony, the person actually operating the station shall, if authorized by the station licensee or the master (acting in this respect as the station licensee's agent), and subject to the priority of communication set forth in § 8.177, permit any person to speak over the station microphone: *Provided,* That such person actually operating the station shall continue to exercise his control so as to insure the continued proper operation of the station.

(c) When the station is a limited ship station used for telephony, the person actually operating the station may, if authorized by the station licensee or the master (acting in this respect as the station licensee's agent), and subject to the priority of communication's set forth in § 8.177, permit any person to speak over the station microphone: *Provided,* That such person actually operating the station shall continue to exercise his control so as to insure the continued proper operation of the station.

(d) For the purpose of paragraphs (b) and (c) of this section, any microphone, without regard to its location on board ship, may be construed to be the station microphone when it is electrically connected to the modulating system of the radiotelephone transmitting apparatus.

§ 8.152 *Operator required by statute for safety.* (a) The radio installation required by Part II of Title III of the Communications Act or by the Safety Convention, for purposes of safety on board a ship of the United States, shall be in charge of and shall be operated only by one or more qualified operators who shall be subject to the lawful authority of the master.

NOTE: A qualified operator for the purpose of this section on a ship of the United States is a person holding a radio operator's license of the proper class, as prescribed and issued by the Commission. See Part 13 of this chapter and/or any applicable orders promulgated by the Commission.

(b) Each cargo ship of the United States required by Part II of Title III of the Communications Act to be fitted with a radiotelegraph installation and not exempted therefrom by the Commission, which is not fitted with an auto-alarm, and each passenger ship required by that statutory provision to be fitted with a radiotelegraph installation and not exempted therefrom by the Commission, shall, for safety purposes, carry at least two qualified operators.

(c) Each cargo ship of the United States required by Part II of Title III of the Communications Act to be fitted with a radiotelegraph installation and not exempted therefrom by the Commission, which is fitted with an auto-alarm in accordance with that statutory provision, shall, for safety purposes, carry at least one qualified operator who shall have had at least six months previous service in the aggregate as a qualified operator in a station on board a ship or ships of the United States.

(d) Each cargo ship of the United States required by Part II of Title III of the Communications Act to be fitted with a radiotelephone installation and not exempt therefrom by the Commission, shall, for safety purposes, carry at least one qualified operator holding an operator's license issued by the Commission which is appropriate for the purpose under the provisions of Part 13 of this chapter.

(e) Each vessel of the United States transporting more than six passengers for hire, which is required by Part III of Title III of the Communications Act to be equipped with a radiotelephone installation and not exempted therefrom by the Commission, shall, for safety purposes, carry at least one qualified operator holding an operator's license issued by the Commission which is appropriate for the purpose under Part 13 of this chapter.

§ 8.153 *Operator required by Safety Convention.* (a) Each ship of the United States which is not subject to Part II of Title III of the Communications Act but which is required by the radio provisions of the Safety Convention to be fitted with a radiotelegraph installation, which has not been exempted therefrom by the Commission, shall, for safety purposes, carry at least the number of qualified operators specified in subparagraphs (1) and (2) of this paragraph. A qualified operator for this purpose is a person holding an operator's license issued by the Commission which is appropriate for the purpose under the provisions of Part 13 of this chapter.

(1) If fitted with an auto-alarm in proper operating condition at least one qualified operator shall be carried, except that at least two qualified operators shall be carried in the case of a passenger ship carrying or certificated to carry more than 250 passengers and engaged on a voyage exceeding 16 hours duration between two consecutive ports.

(2) If not fitted with an auto-alarm at least two qualified operators shall be carried.

(b) Each cargo ship of the United States which is not subject to Part II of Title III of the Communications Act but which is required by the radio provisions of the Safety Convention to be fitted with a radiotelephone installation which has not been exempted therefrom by the Commission, shall, for safety purposes, carry at least one qualified operator holding an operator's license issued by the Commission which is appropriate for the purpose under the provisions of Part 13 of this chapter.

§ 8.154 *Location of authorized operator.* (a) Whenever the transmitting apparatus of a station in the maritime mobile service subject to this part is being used or operated, and the provisions of section 318 of the Communications Act (insofar as such provisions require the actual operation of such apparatus only by a person holding an operator's license of the proper class issued by the Commission) are not waived by the Commission, at least one person holding an operator license of the proper class as prescribed in Part 13 of this chapter shall be on duty at the place where such transmitting apparatus is located, and, subject to the lawful authority of the master, shall be in charge of the station: *Provided,* That in lieu of the transmitter location, such operator may be on duty at a different location on the ship when:

(1) Such apparatus is installed and protected so that it is not accessible to and may not be placed in an operating condition by other than duly authorized persons; and

(2) The transmitting and associated receiving apparatus can be operated from such other location in a manner which will fully comply with all applicable rules of the Commission (in particular § 8.104) and the terms of the station license; and without any delay in normal operation being introduced by such arrangement.

§ 8.155 *Waivers of operator license—*(a) *For VHF telephony.* Subject to the conditions hereinafter stated, the provisions contained in section 318 of the Communications Act are waived, insofar as such provisions require any person to hold an operator's license in order to operate, during the course of normal rendition of service, any ship station (including developmental ship stations) or marine-utility station on board ship, in the maritime mobile service, when such station is authorized to use telephony only and further is authorized to be operated exclusively on one or more radio-channels above 30 Mc: *Provided:*

(1) The person who operates the transmitting equipment is the station licensee or is authorized by the station licensee to do so, and the use of the station during such operation is subject to the lawful direction and authority of the person who, at the time, occupies the position of the master of the ship on which the station is located;

(2) The station uses one or more of the following classes of emission only: A3 or F3 for telephony; and on the same radio-channels as are authorized for telephony A0, A2, F0, F2 solely for transmitting by automatic means attention-signals, signals for actuating selective-calling devices, for brief testing of the authorized apparatus, or station identification, or signals in an emergency involving safety;

(3) The station is authorized to use transmitting equipment only of a type which is acceptable to the Commission for operation in this service by unlicensed persons in accordance with this paragraph;

(4) The transmitting equipment operated by an unlicensed person in accordance with this paragraph is not required on board the ship for safety purposes by any statutory provisions or by any international agreement or treaty in force;

(5) All transmitter adjustments or tests during or coincident with the installation, servicing, or maintenance of the station that may affect its proper operation shall be made by or under the immediate supervision and responsibility of a person holding an operator license of the proper class for this purpose as prescribed in Part 13 of this chapter who shall be responsible for the proper functioning of the station equipment;

(6) Subsequent to any transmitter adjustments made in accordance with subparagraph (5) of this paragraph, and at all other times, the station licensee shall be responsible for determining that the transmitting equipment continues to meet the conditions established by the Commission relative to acceptance of the particular type of equipment for the purpose of operation by unlicensed persons;

(7) The station licensee or the person(s) authorized by the licensee to operate the station shall, in lieu of a licensed operator, comply with the provisions of § 8.154 as though he were a licensed operator;

(8) Nothing contained in this paragraph shall be construed to change or diminish in any respect the responsibility of the station licensee for having and maintaining control of the station or for proper functioning and operation of the station in accordance with law;

(9) No unlicensed person, authorized as provided by this paragraph to operate a station, may lawfully perform any act in relation to such station that he could not lawfully perform if he were acting under the authority of a radio operator license issued in his behalf by the Commission.

(b) *For ship-radar.* (1) No radio operator license is required for the operation on board ship, during the course of normal rendition of service, of ship-radar stations licensed in the radiolocation service (Ship-radar stations heretofore licensed in the ship service are construed to be licensed in the maritime radiolocation service (including the maritime radionavigation service).) *Provided,* That the following conditions are met or provided for by the licensee of the station:

(i) The radar equipment shall employ as its frequency determining element a non-tunable, pulse-type magnetron;

(ii) The radar equipment shall be capable of being operated during the course of normal rendition of service in accordance with the radio law and the rules and regulations of the Commission by means of exclusively external controls, and

(iii) Operation during the course of normal rendition of service pursuant to this subparagraph (1), must be performed exclusively by the master of the radar-equipped ship or by one or more other persons responsible to him and authorized by him to do so.

(2) All adjustments or tests during or coincident with the installation, servicing, or maintenance of the equipment while it is radiating energy must be performed by or under the immediate supervision and responsibility of a person holding a first or second class commercial radio operator license, radiotelephone or radiotelegraph, containing a ship-radar endorsement, who shall be responsible for the proper functioning of the equipment in accordance with the radio law and the Commission's rules and regulations and for the avoidance and prevention of harmful interference from improper transmitter external effects: *Provided, however,* That nothing in this subparagraph shall be construed to prevent persons not holding such licenses or not holding such licenses so endorsed from making replacements of fuses or of receiving-type tubes.

(3) Nothing in this subparagraph shall be construed to change or diminish in any respect the responsibility of any ship radar station licensee for having and maintaining control over the station licensed to him, or for the proper functioning and operation of such station in accordance with the terms of the station license.

§ 8.156 *Posting of operator license.* When a licensed operator is required for the operation of a station subject to this part, the original license of each such operator while he is employed or designated as radio operator of the station shall be posted in a conspicuous place at the principal location on board ship at which the station is operated: *Provided,* That in the case of stations of a portable nature, including marine-utility stations, or in the case where the operator holds a restricted radiotelephone operator permit, the operator may in lieu of posting have on his person either his required operator license or a duly issued verification card (FCC Form 758-F) attesting to the existence of that license.

§ 8.157 *Adjustment or test of equipment.* Notwithstanding any other provisions of this subpart (except § 8.155 (b) (2) which specifically covers ship radar stations), all adjustments or tests of radio transmitting apparatus in any station subject to this part during or coincident with the installation, servicing, or maintenance of such apparatus which may affect the proper operation of such station, must be performed by or under the immediate supervision and responsibility of a person holding a first or second class commercial radio operator license, either radiotelephone or radiotelegraph as may be appropriate for the class of station involved, who shall be responsible for the proper functioning of the station equipment.

§ 8.158 *Certified persons required by Great Lakes Agreement.* (a) For the purpose of complying with Article 7, paragraph 1 (a) of the Great Lakes Agreement, there shall be on board a United States vessel, as an officer or member of the crew, one or more persons holding an operator's license issued by the Commission which is appropriate for that purpose under the provisions of Part 13 of the Commission's rules.

(b) If the vessel is deprived of the services of all certified persons referred to in paragraph (a) of this section without fault or collusion of the master, the vessel may, as a matter of temporary expediency, proceed on her voyage, provided:

(1) The master shall exercise due diligence in an effort to obtain at least one qualified replacement before sailing and failing that shall exercise due diligence to obtain at least one qualified replacement as soon as practicable;

(2) The qualified replacement is made at the destination on the Great Lakes of the vessel;

(3) In addition to the foregoing, the master shall, within 12 hours after the time of arrival of the vessel at the destination, mail to the Secretary, Federal Communications Commission, Washington 25, D. C., an explanation in writing of the full particulars in the matter, including the date the master became aware of the unavailability of the certified person or persons, the scheduled and the actual sailing time of the vessel without a certified person on board, a specific description of his efforts to secure at least one qualified replacement before sailing; and in the case of a vessel whose destination is on the Great Lakes, a statement that a qualified replacement has been or will be secured before the ship again leaves such port.

SUBPART G—GENERAL OPERATING REQUIREMENTS

§ 8.171 *International regulations applicable.* In addition to being regulated by applicable rules of this part, the use and operation of stations subject to this part shall be governed by applicable provisions of the International Radio Regulations and the applicable radio provisions of all other international agreements in force to which the United States is a party.

§ 8.172 *Authority in event of distress.* No provision of the International Radio Regulations shall prevent a ship in distress from using any means of telecommunication available to it for drawing attention, signalling its position, and obtaining help. A distress call and message, however, shall be transmitted only on the authority of the master of, or the person responsible for, the ship from which this call and message are transmitted. No person shall, by means of any station subject to this part, knowingly transmit, or cause to be transmitted, any false or fraudulent signal of distress or communications relating thereto.

§ 8.173 *Authority of the master.* Except as may be regulated by law or international agreement or by the rules of the Commission, the radio service of each station on board ship shall at all times be under the supreme control of the master. However, during any period in which the Department of Defense lawfully may exercise and is in fact lawfully exercising emergency controls over United States merchant shipping, no provisions of the Commission's rules and regulations shall prevent the master of any ship of the United States from taking any action whatsoever in regard to the radio installation, the operators, the transmission and receipt of messages, and the radio service of the ship whenever in his discretion such action is necessary to carry out instructions of the Department of Defense.

§ 8.174 *Secrecy of communication.* The master or the person responsible, as well as all persons who may have knowledge of the text or even of the existence of the radio communications transmitted or received by a station on board ship or of any information whatever obtained by means of the radiocommunication service of such station, shall be under the obligation of observing and insuring the secrecy of communications to the extent required by the Communications Act and the International Radio Regulations.

NOTE: See secs. 501, 502, and 605 of the Communications Act; also Article 21 of the International Radio Regulations, Atlantic City, 1947.

§ 8.175 *Intercommunication in mobile service.* Each ship station in the maritime mobile service at sea shall, within the scope of its normal operations, be bound to exchange radio communication or signals with any other ship station or aircraft station in the maritime mobile service at sea or with any public coast station in the maritime mobile service: *Provided,* That such exchange of radio communication shall be without distinction as to radio systems or instruments adopted by each station.

§ 8.176 *Priority of communications to be observed.* Ship stations in the maritime mobile service shall observe at all times the priority of communications set forth in § 8.177; in particular, all such stations shall give absolute priority to radio communications or signals relating to any ship or aircraft in distress; shall, when any distress signal or communication is anticipated or intercepted; cease all transmission on frequencies which may interfere with any station hearing such radio communication or signal of distress except when engaged in answering or aiding the ship or aircraft in distress, and shall assist the vessel or aircraft in distress, so far as possible, by complying with its instructions.

§ 8.177 *Order of priority of communications.* (a) The order of priority of radiotelegraph communications in the maritime mobile service on any frequency used for this service shall be as follows:

(1) Distress calls (including the international distress signal for radiotelegraphy), international automatic-alarm signals for distress purposes, distress messages, and distress traffic.

NOTE: The international auto-alarm signal intended for use primarily in radiotelegraphy consists of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between two consecutive dashes being one second.

(2) Communications preceded by the international radiotelegraph urgency signal.

(3) Communications preceded by the international radiotelegraph safety signal.

(4) Communications relative to radio direction-finding bearings.

(5) Communications relative to the navigation and safe movement of aircraft.

(6) Communications relative to the navigation, movements, and needs of ships; including weather observation messages destined for an official meteorological service.

(7) Government communications for which priority right has been claimed.

(8) Service communications relating to the working of the radio-communication service or to communications previously transmitted.

(9) All other communications.

(b) The order of priority of radiotelephone communications in the maritime mobile service on any frequency used for this service shall be as follows:

(1) Distress calls (including the international distress signals for radiotelephony and radiotelegraphy), distress messages, and distress traffic.

(2) Communications preceded by the international radiotelephone urgency signal, or known to the station licensee or his agent to consist of one or more urgent messages concerning the safety of a ship, aircraft, or other mobile unit or of some person on board or within sight of the ship, aircraft, or mobile unit.

(3) Communications preceded by the international radiotelephone safety signal, or known to the station licensee or his agent to consist of one or more messages concerning the safety of navigation or important meteorological warnings.

(4) Communications known by the station licensee or his agent to consist of one or more messages relative to the navigation, movements, and needs of ships; including weather observation messages destined for an official meteorological service.

(5) Government communications for which priority right has been claimed.

(6) All other communications.

§ 8.178 *Unauthorized transmissions.* Stations operating in the maritime mobile service shall not engage in radiocommunication which is superfluous or unnecessary in this service. Except in an emergency which requires otherwise, the transmission by ship stations of signals or communications not addressed to an authorized station or stations in the maritime mobile service is prohibited unless radiotelegraphy is used and the transmission, preceded by CQ or CP in accordance with the International Radio Regulations, is intended to be intercepted by authorized stations of the maritime mobile service.

§ 8.179 *Control by coast or government station.* When communicating with a coast station or any government station in the maritime mobile service, ship stations shall, except when transmitting distress signals or controlling distress traffic, comply with instructions given by the coast station or government station relative to the order and time of transmission, to the choice of authorized frequency, to the suspension of communication, and to the permissible type of message traffic that may be transmitted or received by the particular coast station or government station. This provision, however, does not apply in the event of distress, either actual or impending.

§ 8.180 *Cooperative use of frequency assignments.* Unless provided otherwise in this part, or in the particular station authorization, each radio-channel authorized for use by a station on board ship subject to this part is available for such use on a shared basis only and shall not be construed as available for the exclusive use of any one station or any one station licensee. All station licensees shall cooperate in the use of their respective frequency assignment in order to minimize interference and obtain the most effective use of the authorized radio-channels.

§ 8.181 *Prevention of interference.* (a) From the standpoint of interference the operation of a ship radio station (including receiving equipment, auto-alarm, and direction-finder) required by law to be installed on board a vessel for safety purposes, shall have priority over the operation of any other radio apparatus on board the same vessel.

(b) Before commencing transmission (other than signals of distress) a ship station shall, insofar as is practicable, make sure that it will not cause interference to communications in the maritime mobile service being carried on within its range. For this purpose, the operator attending the station shall, before commencing transmission, use the necessary receiving installation to listen on the appropriate frequency or frequencies. If interference is likely, the station shall wait until the existing communications, which it may disturb, have been concluded; with due regard, nevertheless, for the priority of communications designated in § 8.177.

(c) Whenever a radiocommunication in the maritime mobile service is already in progress between two mobile stations or between a mobile station and a coast station and it appears to be interfered with by a subsequent transmission from another mobile station, the latter must cease transmitting at the first request of either of the other two, except as priority may be otherwise determined by § 8.177. The station requesting this cessation must indicate the approximate length of the wait imposed upon the mobile station whose transmission is suspended.

(d) Except in cases of distress, communications between ship stations or between ship and aircraft stations must not interfere with the work of public coast stations. When this work is thus interfered with, the ship or aircraft station which causes it must stop transmitting or change frequency upon the first request of the coast station concerned.

(e) Ship stations when operating on a frequency below 3500 kilocycles or above 30 Mc shall not carry on, or attempt to carry on, communication with any station which, under the currently prevailing conditions of transmission or reception, is not within reliable communication range of the ship station: *Provided,* That this provision shall not apply in event of distress, either actual or impending.

§ 8.182 *Suspension of transmission.* Transmission shall be suspended immediately upon detection by the station or operator licensee, or upon notification by the Commission, of a deviation from the technical requirements of the station authorization, and shall remain suspended until such deviation is corrected, except for transmission concerning the immediate safety of life or property, in which case transmission shall be suspended as soon as the emergency is terminated.

§ 8.183 *Hours of service of ship stations.* (a) Ship stations whose service is not continuous may not close before:

(1) Finishing all operations resulting from a distress call, or urgency or safety signal;

(2) Exchanging, so far as practicable and within the scope of their normal operation, all traffic originating in or destined for public coast stations situated within their range and mobile stations which, being within their range, have indicated their presence before the actual cessation of communication.

§ 8.184 *Maintenance of station log.* (a) Each station on board ship subject to this part which is required, under the provisions of this part pertaining to the particular class of station, to keep a radio station log, shall in addition, comply with the applicable provisions of paragraphs (b) and (c) of this section; the station licensee and the licensed radio operator (when a licensed radio operator is required) in charge of the station shall be responsible for compliance with this section.

(b) The log shall be kept in an orderly manner, in useable form, and in such detail that the information required for the particular class of station concerned is readily available. Key letters or abbreviations may be used if their proper meaning or explanation is contained elsewhere in the same log.

(c) The station log or any portion thereof shall not be erased, obliterated, or wilfully destroyed within the period of retention required by § 8.115. However, during this period any necessary correction may be made of such log but only by the person originating the entry and that person shall strike out the erroneous portion, initial the correction made, and indicate the date of correction.

SUBPART H—WATCHES AND AUTO-ALARMS FOR SAFETY PURPOSES

§ 8.201 *Watch required by International Radio Regulations.* All ship stations employing telegraphy (either compulsorily or voluntarily provided with a radiotelegraph installation) and normally keeping watch on frequencies in the authorized bands between 405 and 535 kc shall, during their hours of service, take the necessary measures to insure an efficient watch by a duly licensed radiotelegraph operator on the international distress frequency 500 kc for three minutes twice each hour, beginning at x h 15 and x h 45, Greenwich mean time (GMT). For this purpose, either a head receiver or a loudspeaker may be used, on condition that use of the loudspeaker is no less effective than use of the head receiver. While maintaining this watch, the operator shall not use or operate any radio equipment (such as, for example, broadcast receivers, or amateur transmitters or receivers) not actually required for maritime mobile service.

§ 8.202 *Watch required by Communications Act.* (a) Each ship of the United States required by Part II of Title III of the Communications Act and the rules of the Commission to be fitted with a radiotelegraph installation and not exempted therefrom by the Commission shall, while being navigated outside a harbor or port, keep a continuous and efficient watch on the international distress frequency 500 kc by means of qualified radiotelegraph operators: *Provided, however,* That in lieu thereof on a cargo ship fitted with an auto-alarm in proper operating condition, a watch of at least eight hours per day, in the aggregate, shall be maintained as herein prescribed by means of a qualified radiotelegraph operator: *Provided further,* That in either instance such operator(s) shall be subject to the conditions and limitations prescribed by § 8.204.

(b) In accordance with the requirement set forth in paragraph (a) of this section for a cargo ship fitted with an auto-alarm in proper operating condition, when such vessel is navigated outside a harbor or port, the watch as prescribed in paragraph (a) shall be maintained by means of a qualified radiotelegraph operator for at least one-third of each day, or portion thereof, during the period of time the vessel is so navigated.

(c) Each cargo ship of the United States required by Part II of Title III of the Communications Act to be fitted with a radiotelephone installation and not exempt therefrom by the Commission, shall, while being navigated outside a harbor or port, keep a continuous and efficient listening watch on the radiotelephone calling and distress frequency 2182 kc whenever the radiotelephone installation is not being used to transmit on that channel or to transmit or receive on any other channel below 30 Mc authorized for maritime mobile services. Such listening watch shall be performed by at least one officer or member of the crew of the vessel who has been designated by the master to perform the listening watch. The person designated by the master may simultaneously perform other duties relating to the operation or navigation of the vessel, provided such other duties do not interfere with the effectiveness of the listening watch.

(d) Each vessel of the United States transporting more than six passengers for hire which is required by Part III of Title III of the Communications Act to be equipped with a radiotelephone installation and not exempted therefrom by the Commission shall, while being navigated in waters specified by section 381 of Part III of Title III, keep a continuous and efficient listening watch on the frequency 2182 kc for the reception of class A3 emission if fitted with equipment for operation in the 2000–3500 kc band for the purpose of meeting radiotelephone requirements of law, or on the frequency 156.8 Mc for the reception of class F3 emission if fitted with equipment for operation in the 152–162 Mc band for this purpose, whenever the radiotelephone installation is not being used to transmit on the listening channel as herein designated or to transmit or receive on any other channel authorized for maritime mobile services. Such listening watch shall be performed by at least one officer or member of the crew of the vessel who, if not the master, has been designated by the master to perform this listening watch. The master or the person designated by the master may simultaneously perform other duties relating to the operation or navigation of the vessel, provided such other duties do not interfere with the effectiveness of this listening watch.

§ 8.203 *Watch required by Safety Convention.* This section is applicable to ships of the United States subject to the radio provisions of the Safety Convention but not at the same time subject to the provisions of Part II of Title III of the Communications Act (for example, certain ships engaged on an international voyage, no part of which is in the open sea).

(a) Each passenger ship of the United States required by the Safety Convention to be fitted with a radiotelegraph installation shall, while at sea, keep continuously an efficient watch on the international distress frequency 500 kc by means of qualified operators, if not fitted with an auto-alarm. If fitted with an auto-alarm, such watch shall be kept while at sea as follows:

(1) If carrying or certificated to carry 250 passengers or less, at least 8 hours watch a day in the aggregate.

(2) If carrying or certificated to carry more than 250 passengers and engaged on a voyage exceeding 16 hours duration between two consecutive ports, at least 16 hours watch a day in the aggregate.

(3) If carrying or certificated to carry more than 250 passengers and engaged on a voyage of less than 16 hours duration between two consecutive ports, at least 8 hours watch a day in the aggregate.

(b) Each cargo ship of the United States of 500 gross tons or more fitted with a radiotelegraph installation for the purpose of complying with the Safety Convention and not exempt therefrom by the Commission shall, while at sea, keep continuously an efficient watch on the international calling and distress frequency 500 kc by means of a qualified radiotelegraph operator, if not fitted with an auto-alarm. If fitted with an auto-alarm, such watch shall be kept by such ships for at least eight hours per day, in the aggregate.

(c) In keeping the watch prescribed in paragraphs (a) and (b) of this section, operators shall be subject to the conditions and limitations prescribed in § 8.204.

(d) Each cargo ship of the United States required by the Safety Convention to be fitted with a radiotelephone installation and not exempt therefrom by the Commission, shall, for safety purposes, while at sea, keep a continuous watch on the radiotelephone calling and distress frequency in the manner prescribed by § 8.202 (c).

§ 8.204 *Provisions governing safety watch.* (a) For the purpose of maintaining the radiotelegraph watches prescribed in §§ 8.202 and 8.203, the operator shall use an effectively operating main or emergency radio receiver complying with the applicable requirements of § 8.503 or § 8.504, respectively, and either a head receiver or a loudspeaker complying with the applicable requirements of § 8.503 or § 8.504, respectively, on condition that use of the loudspeaker is not less effective than use of the head receiver.

(b) While maintaining this watch, the operator shall not use or operate any radio equipment (such as, for example, broadcast receivers or amateur transmitters or receivers) not actually required for maritime mobile service.

(c) During the period of this watch and subject to the provisions of § 8.205, the operator may temporarily interrupt the required listening on the frequency 500 kc while he is transmitting or receiving signals or messages to or from a station operating in the maritime mobile service if it is not possible for the operator to maintain at the same time, by any practicable means, the watch on 500 kc. The provisions of this paragraph shall not relieve the ship station from the obligation of complying with the provisions of § 8.201.

(d) With respect to the provisions of paragraph (c) of this section, the term "by any practicable means" as used in that paragraph shall be construed to include the use of a loudspeaker or a head receiver energized by an additional radio receiver (other than the receiver actually in use for nonwatch purposes) which is adjusted or tuned for effective reception on the radio-channel of which 500 kc is the assigned frequency.

§ 8.205 *Compulsory use of auto-alarm.* (a) The auto-alarm, when provided on a ship compulsorily fitted with a radiotelegraph installation for the purpose of compliance with Part II of Title III of the Communications Act or the radio provisions of the Safety Convention, shall be in operation, connected to the main antenna, and adjusted for normal efficiency according to prevailing conditions of radio reception, at all times while the ship is being navigated outside a harbor or port when a qualified operator is not on watch duty.

(b) Unless the use of an auto-alarm, compulsorily provided as specified in paragraph (a) of this section, is impracticable under the condition hereinafter designated, such auto-alarm shall be in operation, connected to a suitable antenna (for example, a main antenna, an emergency antenna, or an auxiliary antenna) and adjusted for normal efficiency according to prevailing conditions of radio reception, at all times while the ship is being navigated outside a harbor or port, when a qualified operator is on watch duty but the watch is temporarily interrupted (as contemplated under the provisions of § 8.204 (c)) for an extended period, and it is not possible for such operator to maintain, at the same time by any practicable means, the watch on 500 kc. Nothing contained in this paragraph shall relieve the ship station from the obligation of complying with the provisions of § 8.201.

§ 8.206 *Procedure in use of auto-alarm.* (a) Paragraphs (b) and (c) of this section shall apply to the use of an auto-alarm which is provided for the purpose of compliance with Part II of Title III of the Communications Act or the radio provisions of the Safety Convention on a ship compulsorily fitted with a radiotelegraph installation under that act or under the radio provisions of that convention.

(b) While the ship is being navigated outside a harbor or port, the auto-alarm shall be tested at least once every 24 hours by means of the testing device supplied as part of the alarm, the timing of the dashes to be made by reference to the second hand of the ship station clock. A test also shall be made to determine that the auto-alarm mechanism is operated in a normal manner by signals from other stations which are received on the frequency 500 kc. A statement that the foregoing requirement has been fulfilled must be inserted in the radio station log daily.

(c) The qualified operator, when going off watch, shall report to the officer on watch on the bridge whether or not the auto-alarm has been placed in use and adjusted for effective operation as prescribed in § 8.205 (a).

§ 8.207 *Listening required by the Great Lakes Agreement.* While a United States vessel is subject to the Great Lakes Agreement, there shall be continuous effective listening by aural means for reception of class A3 emission on the radio channel of which 2182 kc is the assigned frequency whenever the radiotelephone installation is not being used to transmit on that channel or to transmit or receive on any other channel below 30 Mc authorized for the maritime mobile service. Such listening shall be performed by at least one officer or member of the crew of the vessel who has been designated by the master to perform that listening. The person designated by the master may simultaneously perform other duties relating to the operation or navigation of the vessel, provided such other duties do not interfere with the effectiveness of such listening.

SUBPART I—GENERAL PURPOSE WATCHES

§ 8.221 *Watch on 500 kc.* Ship stations using frequencies in the authorized bands between 405 and 535 kc shall, during their hours of service, remain on watch on the calling frequency 500 kc except when the operator is transmitting on 500 kc, operating the ship station equipment on any other frequency authorized for transmission or reception in the maritime mobile service (including maintenance of the watch on 143 kc as provided by § 8.222) if it is not possible for the operator to maintain at the same time, by any practicable means, the watch for calls on 500 kc. The term "by any practicable means" as used herein shall be construed to include the use of a loudspeaker or a head receiver energized by an additional radio receiver (other than the receiver actually in use for non-watch purposes) which is adjusted or tuned for effective reception on the radio-channel of which 500 kc is the assigned frequency. The provisions of this section, however, shall not relieve the ship from complying with the requirements for a safety watch as prescribed in §§ 8.201, 8.202 and 8.203.

§ 8.222 *Watch on 143 kc.* On condition that compliance with the following requirement shall in no way interrupt or reduce the efficiency of the safety watch prescribed in §§ 8.201, 8.202 and 8.203, each ship station equipped for working by means of class A1 emission on frequencies within the band 90 to 160 kc shall, during its hours of service when not engaged in communication with another station of the maritime mobile service, normally keep watch for calls every hour on the frequency 143 kc for five minutes beginning at x h 35, Greenwich mean time (G. M. T.).

§ 8.223 *Watch on 2182 kc.* (a) Each ship station on board a ship navigating the Great Lakes and licensed to transmit by telephony on one or more frequencies within the band 1600 to 3500 kc shall, during its hours of service for telephony, maintain an efficient watch for the reception of class A3 emission on the radio-channel of which 2182 kc is the assigned frequency, whenever the station is not being used for transmission on that channel or for communication on other radio-channels.

(b) Except for stations on board vessels required by law to be fitted with radiotelegraph equipment, each ship station (in addition to those ship stations specified in paragraph (a) of this section) licensed to transmit by telephony on one or more frequencies within the band 1600 to 3500 kc shall, during its hours of service for telephony, maintain an efficient watch for the reception of class A3 emission on the radio-channel of which 2182 kc is the assigned frequency, whenever such station is not being used for transmission on that channel or for communication on other radio-channels. When the ship station is in Region 1 or 3, such watch shall, insofar as is possible, be maintained at least twice each hour for three minutes commencing at x h 00 and x h 30, Greenwich mean time (G. M. T.).

SUBPART J—PROCEDURE IN EVENT OF DISTRESS

§ 8.231 *Applicable regulations.* In addition to the governing provisions of the International Radio Regulations applicable to the transmission and interception of distress signals and the handling of distress traffic and the special provisions of §§ 8.61 and 8.172, mobile stations which are subject to this part shall, in cases of distress, be governed by this subpart.

NOTE: See Article 37 of the International Radio Regulations, Atlantic City, 1947.

§ 8.232 *Radio-channels for distress.* (a) In case of distress in the maritime service, the frequency to be used shall be the international distress frequency 500 kc with maximum power obtainable; the class of emission to be used if possible shall be A2. Stations which cannot transmit on 500 kc or use A2 emission shall, if possible use their normal calling frequency and normal class of emission with maximum power obtainable.

(b) Until such time as the frequency 2182 kc is effectively guarded for the reception of distress calls mobile stations in regions of the United States (other than the Great Lakes region) not capable of using 500 kc but equipped to use telephony on medium frequencies may, in case of distress only, communicate with stations of the United States Coast Guard on the frequency 2679 kc. In the Great Lakes region, the frequency 2182 kc should be used at any time for radiotelephone distress calls in lieu of the frequency 2670 kc.

§ 8.233 *Form of distress call.* (a) The distress call transmitted by radiotelegraphy comprises:

(1) The international distress signal which consists of the group "three dots, three dashes, three dots," transmitted as a single signal in which the dashes are emphasized so as to be distinguished clearly from the dots (this signal in each instance is transmitted 3 times);

(2) The signal "de"; and

(3) The call sign of the mobile station in distress (transmitted 3 times in each instance).

(b) (1) The distress call, when transmitted by radiotelephony, is generally preceded by the distress signal for radiotelegraphy as designated in paragraph (a) (1) of this section. Such signal may be produced by a whistle or any other suitable means.

(2) The distress call, when transmitted by radiotelephony, comprises the international distress signal "Mayday" (pronounced as the French expression "m'aider") spoken three times; the words "This is," followed by the identification of the mobile station in distress, the whole repeated three times in each instance.

§ 8.234 *Radiotelegraph alarm signal.* The distress call, when transmitted by radiotelegraphy on the frequency 500 kc, should, if possible, be preceded by the international alarm signal transmitted by means of class A2 emission on 500 kc. This alarm signal consists of a series of 12 dashes transmitted in one minute, the duration of each dash being 4 seconds and the duration of the interval between 2 consecutive dashes being one second. The distress signal for radiotelegraphy as designated in § 8.233 (a) (1) shall be transmitted 3 times immediately after the alarm signal, in order to operate such automatic apparatus as may be designed to be actuated by the normal distress signal on 500 kc. When circumstances permit, an interval of 2 minutes shall be observed after transmission of the alarm signal and distress signal, before transmitting the distress message on 500 kc, to allow time for operators warned by these signals to go on watch.

§ 8.235 *Distress message.* (a) The distress call, must be followed, as soon as possible, by the distress message which comprises:

(1) The distress call;

(2) The name of the mobile station in distress;

(3) The particulars of its position;

(4) The nature of the distress;

(5) The kind of assistance desired; and

(6) Any other information which might facilitate rescue.

(b) When telegraphy is used, the distress message shall be transmitted by means of the International Morse Code at a speed not exceeding 16 words per minute nor less than 8 words per minute.

(c) Where no reply to the distress signals or distress message has been received, these signals or this message shall be repeated at intervals (in radiotelegraphy especially during the 500 kc international silent periods), until a reply is received.

(d) When the mobile station in distress receives no answer to a distress message transmitted on a distress frequency, the message may be repeated on any other available frequency on which attention might be attracted.

§ 8.236 *Transmission for radiolocation.* After the transmission of its distress message, a mobile station at sea when equipped for telegraphy shall when possible transmit a signal in the form of 2 telegraphic dashes of approximately 10 seconds duration each, followed by its call sign, to permit radio direction-finding stations (or other stations equipped for radiolocation) to determine its position. This transmission may be repeated by the mobile station, subject to the provisions of § 8.240, whenever it is requested to do so by other stations endeavoring to determine its position.

§ 8.237 *Acknowledgment of distress message.* Any station in the maritime mobile service which receives a distress message relative to a vessel, aircraft, or other unit which is, beyond any possible doubt, in the vicinity of that station, shall, when it has appropriate transmitting apparatus available, immediately acknowledge receipt. If it appears that the vessel, aircraft, or other unit in distress is not in its vicinity, a short interval of time shall elapse before the station acknowledges receipt of the distress message, in order to permit stations that may be nearer to the location of the distress to reply and acknowledge receipt without interference. All stations in the maritime mobile service which hear a distress signal or message must cease immediately any transmission capable of interfering with the distress signal or message and shall listen on the frequency used for the distress signal and message.

§ 8.238 *Form of acknowledgment by telegraphy.* (a) The acknowledgment of receipt of a distress signal or message is transmitted, when telegraphy is used, in the following form:

(1) Call sign of the mobile station in distress (transmitted 3 times);

(2) The signal "de";

(3) Call sign of the station acknowledging receipt (transmitted 3 times);

(4) The signal "RRR"; and

(5) The distress signal.

§ 8.239 *Information from acknowledging stations.* (a) Every mobile station which acknowledges receipt of a distress signal or message must, on the order of the master or person responsible for the ship, aircraft or other vehicle carrying the mobile station, transmit in message form, as soon as possible, the following information in the order shown:

(1) Its name;

(2) Its position;

(3) The course and speed at which it is proceeding towards the vessel, aircraft, or other unit in distress; and

(4) Estimated time of arrival at the scene of distress.

(b) Before transmitting this message, the station must insure that it will not interfere with the transmissions of other stations which are better situated to render immediate assistance to the vessel, aircraft, or other unit in distress.

§ 8.240 *Control of distress traffic.* (a) The control of distress traffic is the responsibility of the mobile station in distress, or of another mobile station which, in accordance with the governing provisions of the International Radio Regulations, has transmitted the distress call. These stations may, however, delegate the control of the distress traffic to another station.

NOTE: See Article 37, paragraph 18, of the International Radio Regulations, Atlantic City, 1947.

(b) When any station has assumed control of distress traffic, it shall be responsible for maintaining silence on the distress frequency, or the frequency being used for distress traffic, for all emissions except distress signals and distress traffic, and for clearing the distress frequency when the distress traffic has ceased.

(c) The station in distress or the station in control of the distress traffic may impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. In telegraphy, the service abbreviation "QRT" followed by the international distress signal is used to impose silence for this purpose.

(d) Any station engaging in radiocommunication with the mobile station in distress or with the station in control of the distress traffic may impose silence on any station which interferes with distress traffic. In telegraphy, this is indicated by using the signal "AS" (wait) followed by the word "distress" and the call sign of the station imposing silence.

(e) In cases of distress, the use of the radiotelegraph service abbreviation "QRT" must be reserved, as far as possible, for the mobile station in distress and for the station controlling distress traffic.

(f) Any station which has been notified to cease transmission in connection with a situation of distress shall not resume transmission on any frequency which may cause interference to distress signals or traffic until notified by the station in control of the distress traffic that the distress traffic has ceased and transmission may be resumed, or until notified by the station issuing the original notice that transmission from the station in question will not interfere with the distress signals or traffic.

§ 8.241 *Supplementary transmissions.* (a) A mobile station located in the general vicinity of the vessel, aircraft, or other unit in distress shall, if possible and when deemed appropriate, upon authorization of the master or person responsible for the station, transmit the radiotelegraph alarm signal on the frequency 500 kc using the maximum available power and class A2 emission, when:

(1) A distress call has been transmitted and was not preceded by the alarm signal; or

(2) Upon audible reception of an alarm signal which appears to be ineffective by reason of improper timing, improper class of emission, insufficient signal strength, interference, or excessive deviation from the frequency 500 kc.

(b) When a mobile station has heard a distress call or distress message for which acknowledgment of receipt has not been given promptly, and when the intercepting station itself is not in a position to render assistance, it shall, subject to the authority of the master, make every effort possible to attract the attention of any station in the maritime service which appears to be in a position to render assistance. For this purpose, transmission of the distress call and distress message may be repeated, if possible on the frequency 500 kc using the maximum available power and if possible class A2 emission, and/or on such other frequency and with such other class of emission as may be deemed necessary or helpful. At the same time all necessary steps shall be taken to notify the authorities who may be able to intervene usefully.

(c) A mobile station which repeats a distress call or distress message shall follow it by the words "transmitted for (insert identity of mobile craft in distress) by", and thereafter its own call sign transmitted 3 times. In radiotelegraphy, the repetition of the distress call or distress message on 500 kc shall, when circumstances permit, be preceded by transmission of the 500 kc international alarm signal followed by an interval of 2 minutes.

SUBPART K—FOREIGN SHIP STATIONS IN UNITED STATES WATERS

§ 8.261 *Inspection of station.* Pursuant to section 303 (n) of the Communications Act, and subject to the provisions of Article 23 of the International Radio Regulations, Atlantic City, 1947; Regulations 16, 18 and 19 of Chapter I of the Safety Convention, London, 1948; and Articles 11, 12 and 14 of the Great Lakes Agreement, the radio installation on board any foreign ship within the territorial jurisdiction of the United States, which installation is subject to the provisions of any act, treaty, or convention binding on the United States, shall be available, at any reasonable time, in any harbor, port, or place in the United States, for inspection by duly authorized representatives of the Commission at such frequent intervals as, within the discretion of the Commission, will insure compliance with applicable rules, regulations, laws, and treaties.

§ 8.262 *Installation for safety purposes.* (a) The provisions of Part II of Title III of the Communications Act, insofar as such provisions require certain radio apparatus in operating condition and one or more qualified operators (for this purpose, a qualified operator is defined by the Communications Act to be "a person holding a certificate as such complying with the provisions of the General Radio Regulations annexed to the International Telecommunications Convention in force, or complying with an agreement or treaty between the United States and the country to which the ship belongs") on board a ship which leaves or attempts to leave any harbor or port of the United States for a voyage in the open sea, apply to a ship of any foreign country except:

(1) A cargo ship of less than 500 gross tons;

(2) A ship of war;

(3) A foreign ship belonging to a country which is a party to any Safety Convention in force between the United States and that country which ship carries a valid certificate exempting said ship from the radio provisions of that Convention, or which ship conforms to the radio requirements of such Convention or Regulations and has on board a valid certificate to that effect, or which ship is not subject to the radio provisions of any such Convention.

(4) A yacht of less than 600 gross tons not subject to the radio provisions of the Safety Convention:

(5) A vessel in tow; and

(6) A vessel leaving or attempting to leave any harbor or port of the United States for a voyage solely on the Great Lakes, or on any bays, sounds, rivers, or protected waters within the jurisdiction of the United States or navigating solely on any of these waters.

§ 8.263 *Limitations on transmission.* (a) Sections 301 and 318 of the Communications Act, relative to station licenses and operator licenses, respectively, are not applicable to any person sending radiocommunications or signals on a foreign ship while the same is within the jurisdiction of the United States; however, such communications or signals shall be transmitted only in accordance with applicable rules of the Commission intended to prevent interference including, among others, the following subparagraphs:

(1) The frequency or frequencies and the class or classes of emission used shall be available for the operation being conducted pursuant to the allocation of frequencies to radio services and the use of classes of emission established by the International Radio Regulations and pursuant to the terms of all other applicable international treaties and agreements to which the United States is a party;

(2) The operation of the radio apparatus shall not cause interference with the normal communications of other radio services, and only the minimum power necessary for effective communication shall be used;

(3) The station shall comply with the applicable provisions of the International Radio Regulations and other applicable international treaties and agreements to which the United States is a party;

(4) The operation of transmitting apparatus employing class B emission is prohibited in any harbor or port of the United States except for emergency communication or for necessary tests of brief duration.

(b) Any transmission by a station on board a foreign man-of-war shall, in addition to the provisions of paragraph (a) of this section, be governed also by the following provisions:

(1) Transmission by radio from any foreign man-of-war while the same is within the territorial waters of the United States is prohibited unless authorized by appropriate United States authorities and carried on in conformity with the provisions of paragraph (a) of this section. Normally, a request from a foreign man-of-war to use its radio transmitting apparatus while in United States ports and territorial waters shall be made to one of the United States naval district commandants or, after arrival in port, to the senior United States Navy Officer present. When a Navy Officer is not present, request shall be made to the port authorities, or to the United States Navy at Washington, D. C.

NOTE: The headquarters of District Commandants concerned are located at Boston, New York, Philadelphia, Norfolk; Charleston, South Carolina; San Diego, San Francisco, Seattle; Pearl Harbor, Territory of Hawaii; and Balboa, Canal Zone. In addition to having senior naval officers stationed at these places, the Navy has officers performing various duties at practically all other important United States ports.

SUBPART L—MESSAGE CHARGES

§ 8.271 *Distress messages.* No charge shall be made by any ship or station in the mobile service of the United States for the transmission of distress messages and replies thereto in connection with situations involving the safety of life and property at sea.

§ 8.272 *Danger messages.* No charge shall be made by any ship station or other station in the maritime mobile service of the United States for the transmission, receipt, or relay of the information concerning dangers to navigation designated in § 8.303 (b), originating on a ship of the United States or of a foreign country.

§ 8.273 *Tariff filing required.* No charge shall be made for the service of any station on board ship subject to this part unless effective tariffs applicable to such service are on file with the Commission, pursuant to the requirements of section 203 of the Communications Act and Part 61 of this chapter.

§ 8.274 *Responsibility for payment.* (a) Each ship station shall be responsible for the payment of all charges accruing to any other station(s) or facilities for the handling or forwarding of messages or communications transmitted by that station.

(b) The transmission by any ship station of information concerning dangers to navigation, made in compliance with the provisions of § 8.303 (b), to any station which imposes a charge for the reception, relay, or forwarding of the required information, shall be free of cost to the ship concerned and any communication charges incurred by the ship for transmission, relay, or forwarding of the information may be certified to the Commission for reimbursement out of moneys appropriated to the Commission for that purpose.

§ 8.275 *Ship position reports.* Any common carrier subject to the Communications Act may furnish reports of positions of ships at sea to newspapers of general circulation, either at a nominal charge or without charge, provided the name of such common carrier is displayed along with such ship position reports.

§ 8.276 *Free safety service.* Notwithstanding any other provision of law, any ship station may render free service in connection with situations involving the safety of life and property, including hydrographic reports, weather reports, reports regarding aids to navigation and medical assistance to injured or sick persons on ships and aircraft at sea: *Provided,* That the Commission, from time to time under particular circumstances, may impose specific limitations on such free service to the extent that it finds desirable in the public interest.

§ 8.277 *Free service for national defense.* Any common carrier subject to the Communications Act may render to any agency of the United States Government free service in connection with the preparation for the national defense. Every such carrier rendering any such free service shall make and file in duplicate, with the Commission, on or before the 31st day of July and on or before the 31st day of January in each year, reports covering the periods of 6 months ending on the 30th day of June and the 31st day of December, respectively, next prior to said dates. These reports shall show the names of the agencies to which free service was rendered pursuant to this paragraph, the general character of the communications handled for each agency, and the charges in dollars which would have accrued to the carrier for such service rendered to each agency if charges for all such communications had been collected at the published tariff rates.

SUBPART M—NATURE OF SERVICE PROVIDED BY SHIP STATIONS AND SHIPBOARD MARINE-UTILITY STATIONS

§ 8.301 *Supplemental eligibility requirements.* (a) Subject to the basic eligibility requirements set forth in § 8.23, authorizations for limited ship stations, marine-utility stations, or public ship stations may be granted to any person, or state or local government subdivision; or any agency of the Federal Government which is subject to the provisions of section 301 of the Communications Act: *Provided,* That when the availability of the frequency assignment requested, or any part thereof, is specifically dependent upon the activity and/or the routes of voyage of the vessel, the application shall clearly show eligibility of the vessel for such station authorization under the provisions of this part which govern the assignment of frequencies: *And provided further,* That:

(1) An applicant for an authorization to operate a public ship station must request a frequency assignment on which the transmission of public correspondence is not excluded by any of the provisions of this part (although additionally he may request any other frequency assignment).

(2) An applicant for an authorization to operate a limited ship station or a marine-utility station must request a frequency assignment on which the transmission of public correspondence is excluded.

§ 8.302 *Points of communication.* Subject to the conditions and limitations imposed by the terms of the particular station license or by applicable provisions of this part with respect to the use of particular radio-channels, limited ship stations, marine-utility stations on board ships, and public ship stations are authorized to communicate with any station in the maritime mobile service including such other classes of stations as may be appropriately authorized in accordance with the provisions of this part for such communication: *Provided, however,* That for purposes of public correspondence between ship and shore, public ship stations are authorized to communicate only with public coast stations and United States Government coast stations open to public correspondence.

§ 8.303 *Service requirements for all ship stations.* (a) Unless prohibited by the terms of the station license or by other sections of this part relative to the limited use of a specifically designated frequency, each ship station shall, within the scope of its normal operations and without discrimination, acknowledge all calls directed to it and receive from stations operating in the maritime mobile service, all messages and communications which are addressed to the ship or to any person or persons on board and which are for termination on such ship.

(b) The master of every ship, equipped with licensed radio transmitting apparatus capable of providing communication with other ships or with a coast station, on meeting with a direct danger to the navigation of other ships such as dangerous ice, a dangerous derelict, a tropical storm, or any other direct danger to navigation, shall cause to be transmitted, in so far as is possible, all pertinent information relating thereto, to ships in the vicinity and to the appropriate authorities provided that such procedure, in the discretion of the master, will not be a repetition of action already taken for this purpose by another station.

(c) At the request of any station operating in the maritime mobile service, a ship station may, within the scope of its normal operation accept messages or communications as requested for retransmission to any other station in the maritime mobile service. Whenever such messages or communications have been received and acknowledged by a ship station for this purpose, it shall be incumbent upon that station to retransmit the message as directed, with the least delay possible.

§ 8.304 *Service requirements for public ship stations.* In addition to such messages as are necessary for compliance with § 8.303, and except as may be otherwise limited by the terms of this part governing the use of particular frequencies or by the terms of the station license, a public ship station within the scope of its normal service, without discrimination and upon reasonable demand, shall provide, subject to the order of priority prescribed in § 8.177, a service of public correspondence for any person who, while on board in any status or capacity, requests the service covering any subject matter that legally may be transmitted by radio: *Provided, however,* That, unless specifically authorized by the Commission in individual cases in advance, this service shall not be authorized to be provided when the ship carrying the station is out of service as a ship.

§ 8.305 *Service of limited ship stations and marine-utility stations.* In addition to such messages as are necessary for compliance with § 8.303 and except as may be otherwise limited by the terms of this part governing the use of particular frequencies or by the terms of the station license, a limited ship station or a marine-utility station is authorized to transmit within the scope of its normal operations messages necessary for the safe, expeditious or economical operation of ships or (when necessary) for the safety of aircraft.

SUBPART N—USE OF RADIOTELEGRAPHY

§ 8.321 *Assignable frequencies.* (a) (1) Each of the specific frequencies in kilocycles hereinafter designated in this paragraph may be authorized as an assigned frequency for use by ship stations (public or limited) employing telegraphy in accordance with the provisions of paragraph (b) of this section and Subpart E of this part.

143 calling
152
153
154
155
156
157
158
410[1]
425
444[1]
448 (region 2 only).
454
468
480
500 calling and distress.
512 kc (regions 1 and 3 only)[1]

[1] Subject to the special conditions and limitations set forth in paragraph (b) of this section.

(2) Except as may be otherwise specified herein or in the particular station license, the radio channels of which the above frequencies are the assigned frequencies may be employed for communication with ship stations or coast stations (public or limited).

(b) (1) The frequency 444 kc is assignable exclusively for communication with United States Government stations; its use for any other communication (except distress) is not authorized: *Provided,* That harmful interference shall not be caused to the service of any coast station.

(2) In addition to the transmission of specific signals for purposes of radiolocation, the radio channel of which 410 kc is the assigned frequency may be used for communication by radiotelegraphy with direction finding stations in connection with established international operating procedure, relative to radiolocation by means of direction finding.

(3) In regions 1 and 3 the frequency 512 kc may be used as a working frequency and it may also be used by ship stations as a supplementary calling frequency when 500 kc is being used for distress purposes.

(c) In addition to the frequencies shown in paragraph (a) of this section other frequencies may be authorized temporarily for the purpose of facilitating the implementation of the Agreement concluded at the Extraordinary Administrative Radio Conference, Geneva, 1951.

§ 8.322 *Frequencies for use in distress.* (a) The international distress frequency is 500 kc; it is used as an assigned frequency for this purpose by ship or aircraft stations, using frequencies in the band 405 to 535 kc, when requesting assistance from the maritime services. It is used, preferably with class A2 emission, for the distress call and distress traffic.

(b) The frequency 8364 kc is designated as the assigned frequency for the use of survival craft equipped to transmit on frequencies within the band 4000 kc to 23000 kc and desiring to establish with stations of the maritime mobile service, communications relating to search and rescue.

§ 8.323 *Frequencies for calling.* (a) The general international calling frequency is 500 kc; the radio-channel of which this frequency is the assigned frequency shall be used by any ship station engaged in radiotelegraphy in the authorized bands between 405 and 535 kc, and by aircraft desiring to enter into communication with a station of the maritime mobile service using frequencies in this band. The radio-channel for replying to a call sent on the general calling channel (500 kc assigned frequency) is the same channel as that used for the call. In Region 2, and in other areas of heavy radiotelegraph traffic in this band, ship stations shall request coast stations to answer by means of their normal working channel. In order to facilitate the reception of distress calls, all stations using the radio-channel of which 500 kc is the assigned frequency shall reduce to the minimum their transmissions on this channel.

(b) The frequency 143 kc is the international calling frequency in the maritime mobile service in the band 90 to 160 kc (class A1 emission only). The frequency for replying to a call sent on the frequency 143 kc is, for ship stations, 143 kc, the same as that of the call. (Coast stations reply on their normal working frequency in this band.) When a ship station which uses frequencies within the band 90 to 160 kc desires to establish communication with another station of the maritime mobile service, it shall call that station on the frequency 143 kc, unless the International List of Coast and Ship Stations provides otherwise. This frequency shall be used exclusively for individual calls and replies to such calls and for the transmission of signals preparatory to traffic.

(c) In Region 2, the frequency 2091 kc is the international calling frequency for ship stations using telegraphy within the band 2065–2107 kc. It shall be used for call, reply and signals preparatory to traffic by all ship stations using telegraphy to establish communication with other ship stations operating in the band 2065–2107 kc or with coast stations using telegraphy and operating in the band 2000–2850 kc: *Provided,* That transmission by ship stations for this purpose on any calling frequency within the band 2088.5–2093.5 kc is permissible as a practical operating procedure to minimize interference, in lieu of transmission on the frequency 2091 kc. The use of the frequency 2091 kc or any other calling frequency within the band 2088.5–2093.5 kc by ship stations for purposes other than those stipulated in this paragraph (except for transmitting distress traffic) is not authorized. A ship station, after establishing communications on a calling frequency within this band, shall change to an authorized working frequency for the transmission of traffic.

(d) Each of the specific frequencies between 2 Mc and 23 Mc designated in table 1–b of Appendix II to this part may be authorized in accordance with Appendix II as an assigned calling frequency for use by public or limited ship stations or, where specifically so indicated by Appendix II, by aircraft stations for establishing communication with stations of the maritime mobile service.

§ 8.324 *Frequencies for working.* (a) Each assigned frequency listed in §§ 8.321 (a), and which is not identified therein with a specific use or function, is authorized as an assigned frequency for "working".

(b) Ship and aircraft stations using telegraph and working on frequencies within the band 415 to 490 kc shall use whenever practicable, an authorized working frequency of which 425, 448, 454, 468 or 480 kc is the assigned frequency. The frequency 448 kc may be used in Region 2 only.

(c) The calling channel of which 500 kc is the assigned frequency may be used for the transmission of distress, urgency, and safety messages; except for the applicable provisions of §§ 8.402 and 8.403 relative to radiolocation, any other use of this channel for working is prohibited.

(d) In so far as is practicable, ship station shall use frequency assignments within the high frequency-band (3000 to 23000 kc) only when other frequency assignments will not provide effective communication.

(e) In addition to the frequencies designated by paragraph (a) of this section for working, working frequencies are available for assignment, in accordance with Appendix II to this part, as follows:

(1) For use by ship stations (public or limited) on board passenger ships, and by aircraft stations for communication with stations of the maritime mobile service, each of the specific frequencies designated in table 1–a of Appendix II to this part in the following bands:

2065–2107 kc[1]
4133–4177 kc
6200–6265.5 kc
8265–8354 kc
12400–12531 kc
16530–16708 kc
22070–22220 kc

[1] Frequencies in this band are not assignable to aircraft stations.

(2) For use by ship stations (public or limited) on board cargo ships, each of the specific frequencies designated in table 1–c of Appendix II to this part in the following bands:

2065–2107 kc
4187–4238 kc
6280.5–6357 kc
8874–8476 kc
12561–12714 kc
16748–16952 kc
22270–22400 kc

(f) In addition to the frequency assignment designated for telegraphy in the license of a ship station, such station, when working by telegraphy with a coast station, may, on condition that its emission-bandwidth and frequency tolerance shall be within the respective limits thereof permitted for the coast station, transmit:

(1) On a telegraph working channel of a coast station within the band 110 to 150 kilocycles (except within the band 140 kc to 146 kc) when directed to do so by the coast station for which the channel is authorized: *Provided,* Interference is not caused to the service of any land, fixed, broadcast, or radiolocation station: *And provided,* That the emission shall be class A1 only.

(2) On a telegraph working channel of a coast station within the band 415 to 490 kc when directed to do so by the coast station for which the channel is authorized.

(g) (1) In addition to use of the frequency assignment designated for telegraphy in the license of a ship station, such station when communicating by telegraphy with a mobile or land station of the United States Government may transmit on a government frequency assignment when authorized or directed to do so by the government station responsible or by the government department or agency for which use of such frequency assignment is authorized; on condition that the emission-bandwidth and frequency tolerance of the ship station shall be within the respective limits thereof required to be maintained by the government station. Under these circumstances, the ship station assigned frequency, the class of emission, and the permissible class of traffic shall be designated and controlled by the responsible government station, department, or agency: *Provided,* That on frequencies below 160 kc and within the bands 2000 to 2850 kc and 17000 to 25000 kc the emission shall be class A1 only.

(2) Frequencies assigned to government radio stations are assignable to non-Government ship radio stations for communication with other non-Government stations by telegraphy when such communication is necessary in connection with activities performed in coordination with or in behalf of the Federal Government and where the Commission determines, after consultation with the appropriate government agency or agencies, that such assignment is necessary.

§ 8.325 *Use of Morse Code required.* The signal code employed for telegraphy by stations in the maritime mobile service shall be the Morse Code signals specified in the Telegraph Regulations annexed to the International Telecommunication Convention (Atlantic City, 1947). However, for radiotelegraph communication of a special character, the use of other signals may be specifically authorized by the Commission in response to an appropriate application therefor.

§ 8.326 *Identification of stations.* All radiotelegraph emissions of a ship station shall be clearly identified by transmission therefrom of the official call letters assigned to that station for telegraphy by the Commission. These call letters shall be transmitted by telegraphy in accordance with § 8.325 and the procedure set forth in the International Radio Regulations and by means of the class of emission normally used by the station for telegraphy: *Provided,* They shall be transmitted always upon completion of any transmission when the station resumes its watch or suspends transmission for an indefinite time; in addition they shall be transmitted at intervals not exceeding 15 minutes whenever transmission is sustained for a period exceeding 15 minutes.

§ 8.327 *Procedure in testing.* (a) Ship stations must use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the radiotelegraph testing procedure described below shall be followed.

(1) The licensed radiotelegraph operator responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress; if they are likely to interfere with the service of a coast station or aeronautical station in the vicinity of the ship station, the consent of the former station(s) must be obtained before the test emissions occur.

(2) The operator shall transmit the signal "IE" (two dots, space, one dot) on the test frequency as a warning that test emissions are about to be made on that frequency. When the frequency or frequencies of the test emissions is/are within the frequency-band 405–535 kc, a listening watch shall be maintained on 500 kc by a licensed radiotelegraph operator at the station throughout the test period.

(3) If, as a result of transmitting the test signal "IE", any station indicates, by transmitting the signal "$\overline{\text{AS}}$" (wait), that it anticipates harmful interference, testing shall be suspended. When transmission of "IE" is resumed and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in subparagraph (4) of this paragraph.

(4) Test signals composed of a series of "VVV" having a duration of not more than ten seconds, followed by the call sign of the testing station shall be transmitted. The call sign shall be sent clearly and at relatively slow speed. This test transmission shall not be repeated until a period of at least one minute has elapsed; on the frequency 500 kc in a region of heavy traffic, a period of at least five minutes shall elapse before the test transmission is repeated.

(b) When testing is conducted on the frequency 500 kc, no tests shall be conducted during the 500 kc silent periods. Care must be exercised not to so prolong and space the dash portion of the "VVV" series as to form the alarm signal.

§ 8.328 *Radiotelegraph operating procedure.* (a) Except for the transmission of distress or urgency signals, all transmissions from stations on board ship must cease within the band 485 to 515 kc during each 500 kilocycles silent period, i. e., for three minutes twice an hour beginning at x h 15 and x h 45, Greenwich mean time (GMT).

(b) In order to facilitate radiotelegraph communication in the maritime mobile service, all ship stations transmitting by means of telegraphy shall, whenever practicable, use the service abbreviations ("Q" signals) listed in Appendix 9 of the International Radio Regulations (Atlantic City, 1947).

(c) In addition to compliance with all applicable sections of this part, the operation of ship stations using telegraphy for call, reply, and the transmission of message traffic shall, in particular, comply with all applicable provisions of Articles 29 (except subparagraph (2) of paragraph 8 thereof), 30, 31, 32, 38, 39, and 40 of the International Radio Regulations (Atlantic City, 1947).

§ 8.329 *Station documents.* (a) All ship stations on board ships compulsorily fitted with a radiotelegraph installation shall be provided with the following documents:

(1) A valid station license;

(2) The necessary operator license or licenses;

(3) The station log required by this part for stations of this category;

(4) The Alphabetical List of Call Signs;

(5) The List of Coast Stations and Ship Stations;

(6) The List of Radio Location Stations;

(7) The List of Stations performing Special Services;

(8) Such provisions of the International Radio Regulations (Atlantic City, 1947), including Articles 23, 24, 25, 26, 29, 30, 31, 32, 35, 37, 38, 39, 40, 41, 44, and 45, as are necessary for the operation of the radiocommunication and radiolocation service on board ship;

(9) Telegraph tariffs of the countries for which the station most frequently accepts radiotelegrams;

(10) Part 8 of this chapter.

(b) All ship stations on board ships not compulsorily fitted with a radiotelegraph installation, but using telegraphy, shall be provided with the documents prescribed by subparagraphs (1), (2), (3), (4), (5), and (10) of paragraph (a) of this section.

(c) These documents shall be continuously and readily available to the licensed operator on duty during the hours of service of the station.

§ 8.330 *Station records.* (a) (1) Each ship station authorized to use telegraphy on frequencies within the band 90 to 535 kc shall maintain an accurate radiotelegraph log. The first page of each portion of the log covering each voyage shall consist of a "title page" which, upon completion of all entries for the particular voyage, shall contain the following information:

(i) Name of ship and call letters of ship station;

(ii) Period of time covered by such portion of the log;

(iii) Number of pages constituting such portion of the log;

(iv) A statement as to whether or not such portion of the log contains distress entries; if so, the pages containing such entries shall be designated;

(v) Operator's signature, mailing address, and radio operator license data (number, class, and date of issuance). In addition the log shall be maintained as follows:

(2) (i) Each sheet of the log shall be numbered in sequence, for each voyage, and shall include the name of the vessel, official call letters of the ship station and the name of the operator on watch.

(ii) The entry "on watch" shall be made by the operator beginning a watch, followed by his signature. The entry "off watch" shall be made by the operator being relieved or terminating a watch, followed by his signature. All log entries shall be currently completed at the end of each watch by the operator responsible for the entries. The use of initials or signs is not authorized in lieu of the operator's signature.

(3) During the period a watch is maintained by an operator, all calls transmitted to or from the ship station and all replies transmitted or received shall be entered, stating the time and frequencies, and the call letters of the station communicated with or heard. (If desired, the names of the stations or ships also may be entered.) In addition, a notation of any messages exchanged shall be entered stating the time, the frequency in kilocycles, and the call letters of the station(s) heard, or communicated with. (If desired, the names of the stations or ships also may be entered.) In so far as possible, a positive entry with respect to reception on 500 kc shall be made at least once in each 15 minutes. The entries required by subparagraph (5) of this paragraph shall be acceptable as positive entries: *Provided,* Operating conditions are such as to prevent additional entries being made.

(4) The date and time of each occurrence or incident required to be entered in the log shall be shown opposite the entry and the time shall be expressed in Greenwich mean time (GMT),[1] except that in the Great Lakes region the time shall be expressed in eastern standard time (e. s. t.) (counted from 00:00 to 24:00 o'clock, beginning at midnight). The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation "GMT" (e. s. t. in the Great Lakes region) shall be marked at the head of the column in which the time is entered.

(5) During the period a watch is maintained by an operator, an entry shall be made twice per hour stating whether or not the international silent period was observed. In addition, entries shall be made indicating any signals or communications heard on 500 kilocycles during this period. If no signals are heard on 500 kc, an entry to that effect shall be made. The use of rubber stamps for making entries to show observation of the silent period is not authorized.

(6) All distress calls, automatic-alarm signals, urgent and safety signals made or intercepted, the complete text, if possible, of distress messages and distress communications, and any incidents or occurrences which may appear to be of importance to safety of life or property at sea, shall be entered, together with the time of such observation or occurrence, and the position of the ship or other mobile unit in need of assistance, if it can be determined.

(7) Whenever harmful interference is experienced, an entry shall be made to that effect, stating the source of the interference, if known.

(8) The approximate geographical location of the ship, preferably the noon position, shall be entered each day of each voyage, either in terms of latitude and longitude, or as the distance in nautical miles and the direction from a known fixed point. For this purpose, the master of the ship shall furnish this information to the radio operator. The position report so furnished shall correspond to any entry of the same position made in other official records of the ship.

(9) An entry shall be made of the date and time of departure and arrival of the vessel at each port, including in each entry the name of the port.

(10) A daily entry shall be made regarding comparison of the radio station clock with standard time, including an indication of any errors observed and corrections made. For this purpose, authentic radio time signals received from land or fixed stations shall be acceptable as standard time.

(11) All test transmissions shall be entered, together with the time of such transmissions and the approximate geographical location of the vessel, without regard to whether two-way communication with any other station is established.

(12) Any failure of equipment to operate as required, any failure of power supply, any inability to obtain sufficient power to charge storage batteries or to properly operate the radio installation and any incidents tending to unduly delay communications shall be entered.

(b) In addition to the radio log requirements stipulated in paragraph (a) of this section, the radio log of each ship station authorized to use telegraphy on frequencies within the band 90 to 535 kc, shall, when the ship is required by law and regulations to keep a radiotelegraph watch on 500 kc for safety purposes by means of a qualified operator, comply also with the following provisions:

(1) Entries shall be made of the results of tests of the emergency installation including transmitter antenna current, hydrometer readings of lead-acid storage batteries, voltage readings of other types of batteries, and quantity of fuel available for engine generators.

(2) An entry shall be made each time the emergency power supply is used (when the vessel is in the open sea) to carry on communication (other than a watch for safety purposes), stating the approximate period of time of such use.

(3) Results of inspections and tests of lifeboat radio equipment, when installed in compliance with requirements of law, prior to departure of the vessel from a harbor or port and the results of weekly inspections of such lifeboat equipment shall be entered.

(4) On a cargo vessel equipped with an auto-alarm, the entry "auto-alarm on", "sensitivity set at (The actual setting of the sensitivity control at the time the auto-alarm is placed in operation should be designated)", and the entry "auto-alarm off", respectively, shall be made whenever the operator places the auto-alarm in and out of operation. Results of the required auto-alarm tests shall be entered daily, including the sensitivity-control setting and the min-

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[1] For example, 8:01 p. m. eastern standard time should be entered as 0101 GMT; 8:30 a. m. eastern standard time should be entered as 1330 GMT; 7:45 p. m. eastern standard time should be entered as 0045 GMT.

imum number of 4-second dashes from the testing device which were necessary to properly operate the alarm.

(5) On a cargo vessel equipped with an auto-alarm, an entry shall be made in the radio station log whenever the visual indicator installed on the bridge (to indicate when the alarm becomes inoperative due to prolonged atmospherics or other interference), remains actuated for a continuous period of 5 minutes. A statement shall be included giving particulars as to the time the operator was called to make the necessary repairs or adjustments; any reason for the failure; the names of any parts removed, added, or substituted; repairs effected; and the time the alarm was restored to proper operating conditions.

(6) On a cargo vessel equipped with an auto-alarm, an entry shall be made in the radio station log whenever the auto-alarm becomes inoperative due to causes not indicated by the audible warning or the visual indicator, or whenever the audible warning is actuated. The entry shall include a statement showing the time the operator was called to make any necessary repairs or adjustments; the reason for the audible alarm being actuated or failing to be actuated, any parts removed, added, or substituted; repairs effected; and the time the auto-alarm was restored to proper operating condition.

(7) A daily entry shall be made while the ship is at sea showing whether the storage batteries forming part of the main installation or the emergency installation were brought up to the normal full charged condition that day.

(8) Entries shall be made stating when each storage battery used as the power supply for the main and emergency installations is placed on charge or off charge.

(9) Entries shall be made stating details of maintenance of lifeboat radio equipment, including a record of charging of any storage batteries supplying power to such equipment. The record of charging shall show when such storage battery is placed on charge and when it is taken off charge.

(c) Each ship station authorized to use telegraphy, on frequencies above 550 kc exclusively (except ship stations on the Great Lakes and on board vessels navigated solely on inland waters of the United States), shall maintain an accurate radiotelegraph log as prescribed in paragraph (a) of this section: *Provided*, That paragraph (a) (3) and (5) of this section shall, in this case, not be applicable.

(d) Each ship station on the Great Lakes and on board a vessel navigated solely on inland waters of the United States which is authorized to use telegraphy, on frequencies above 550 kc exclusively, shall maintain an accurate radiotelegraph log as follows:

(1) Each sheet of the log shall be numbered in sequence and shall include the name of the vessel, official call letters of the ship station and the signature of the licensed operator in attendance at the time communication is effected.

(2) An entry shall be made for each complete exchange of communications with any station, stating the approximate geographical location of the vessel, the call letters or the name of the station communicated with, the time of the communication, the nature of the messages or signals exchanged, and designation of the transmitting frequencies.

(3) All test transmissions shall be entered, including designation of the transmitting frequency, together with the time of commencement and completion of such transmissions and the approximate geographical location of the vessel, without regard to whether two-way communication with any other station is established.

(4) All distress calls, urgent and safety signals made or intercepted; the complete text, if possible, of distress messages and distress communication; and any incidents or occurrences which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation of concurrence, designation of the frequency on which such transmissions were received, and the position of the ship or other mobile unit in need of assistance, if it can be determined.

(5) Any failure of equipment to operate as required, any failure of power supply, any inability to obtain power to charge storage batteries or to properly operate the radio installation and any incidents tending to unduly delay communication shall be entered.

(6) The date and time of making an entry shall be shown opposite the entry and the time shall be expressed as follows:

(i) For vessels navigated on the Great Lakes:

Eastern standard time (e. s. t.) (counted from 00:00 to 24:00 o'clock beginning at midnight.[3] The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation "e. s. t." shall be marked at the head of the column in which the time is entered.

(ii) For vessels navigated on inland waters of the United States, other than the Great Lakes:

Local standard time (e. s. t., c. s. t., etc.) (counted from 00:00 to 24:00 o'clock, beginning at midnight).[3] The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation "e. s. t." or "c. s. t.", etc., shall be marked at the head of the column in which the time is entered. However, this provision shall not prohibit the use of time entries expressed in GMT (and so indicated) in lieu of local standard time.

(e) In all ship stations authorized to transmit on frequencies within the band 405 to 535 kc, a written record shall be maintained of the adjustments of the transmitting and receiving equipment for operation on the assigned frequencies 410 kc or 500 kc and at least one authorized working frequency within this band. This record shall be posted at all times in a conspicuous place on or near the particular equipment involved.

(f) The ship radiotelegraph log currently in use shall be kept by the licensed operator(s) of the station and while in use it shall be located in the main radiotelegraph operating room of the ship. At the conclusion of each voyage terminating at a port of the United States, the original station log or a duplicate thereof dating from the last departure of the ship from a United States port shall be retained under proper custody on board the ship for a sufficient period of time but not necessarily in excess of 24 hours, to be available for inspection by a duly authorized representative(s) of the Commission. Thereafter the original log, and the duplicate log, if provided, may be filed at an established shore office of the ship station licensee, and shall be retained as stipulated by § 8.115.

SUBPART O—USE OF RADIOTELEPHONY

§ 8.351 *Assignable frequencies.* (a) Each of the specific frequencies in kilocycles hereinafter designated in this paragraph may be licensed as an authorized carrier frequency for use by ship stations employing telephony by means of amplitude modulation subject to and in accordance with the provisions of paragraph (d) of this section, other applicable sections of this subpart, and Subpart E of this part:

2003	2366	4101.5	12357.3
2009	2382	4115.3	12372.7
2031.5	2390	4122.2	12380.4
2118	2406	4129.1	12395.8
2126	2430	4372.4	16471.9
2134	2572	[1] 6240	16487.3
2142	2638	[1] 6455	16525.8
2158	2738	8198.4	16510.4
2166	2782	[1] 8205.5	22027.3
2182	2784	8212.6	22042.7
2198	2830	8219.7	22065.8
2206	4067	8248.1	
2214	4087.7	8262.3	

[1] Mississippi River System only.

(b) Each of the specific frequencies in megacycles hereinafter designated in this paragraph may be licensed as an authorized carrier frequency for use by ship stations or marine-utility stations on board ship employing telephony by means of either amplitude modulation or frequency modulation subject to and in accordance with the provisions of other applicable sections of this subpart, and Subpart E of this part:

35.06	35.10	35.14	35.18	43.02

(1) Persons authorized pursuant to this part to operate radio stations on frequencies in the band 35-45 Mc must recognize that the band is shared with various services in other countries; that harmful interference may be caused by tropospheric and ionospheric propagation of signals from distant stations of all services of the United States and other countries operating on frequencies in this band; and that no protection from such harmful interference generally can be expected. Persons desiring to avoid such harmful interference should consider operation on available frequencies higher in the radio spectrum not generally subject to this type of difficulty.

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[3] For example, 7:01 p. m. eastern standard time would be entered as 1901 e. s. t.; 7:30 a. m. eastern standard time would be entered as 0730 e. s. t.; 6:45 p. m. eastern standard time would be entered as 1845 e. s. t.

(c) Each of the specific frequencies in megacycles hereinafter designated in this paragraph may be licensed as an authorized carrier frequency for use by ship stations and/or marine-utility stations as respectively designated herein which employ telephony by means of frequency modulation in Region 2 or by means of either frequency modulation or amplitude modulation in Regions 1 and 3, subject to and in accordance with the provisions of other applicable sections of this subpart and Subpart E of this part:

(1) Available for ship stations and marine-utility stations:

156.3
156.4
156.5
156.6
156.7
156.8
156.9
157.0

(2) Available for ship stations only:

157.3
157.35
157.4

(d) Assignment of the specific carrier frequencies designated in paragraph (a) of this section and use of frequency assignments of which those frequencies are the authorized carrier frequencies shall be subject to the express limitations and conditions hereinafter set forth in this paragraph:

(1) Except for test purposes, the frequencies 2738 kc and 2830 kc may not be used or assigned unless the licensee or applicant therefor submits to the Commission a certification in accordance with the requirements of subparagraph (2) of this paragraph. Transmissions on these frequencies for such test purposes are limited to those necessary for making field intensity measurements to determine whether a particular transmitter complies, either before or after modification, with the requirements set forth in subparagraph (2) of this paragraph. In making such test transmissions, the operating procedures set forth in § 8.365 shall be followed explicitly.

(2) The certification required by subparagraph (1) of this paragraph shall be that made by the manufacturer of the equipment or shall be signed by a person holding at least a second class radiotelephone operator license and shall show the number and class of such license. It shall state that by reason of tests or measurements of the transmitter therein described and performed by the certifier or under his supervision, it has been determined:

(i) That the level of any emission appearing on the second harmonic frequency of the particular carrier frequency desired to be used or assigned is attenuated below the level of the unmodulated carrier on that frequency by not less than the amount shown in the following table:

Maximum authorized transmitter power as specifically defined in § 8.7 (ii):	*Attenuation (decibels)*
Up to and including 150 watts	40
Over 150 watts up to and including 600 watts	50
Over 600 watts	60

and

(ii) That the transmitter meets the foregoing requirements without modification or in the event that modification of the transmitter was found to be necessary, a specific description of such modification, including a description of any wave trap or device which was utilized.

(3) The requirements of subparagraphs (1) and (2) of this paragraph shall not apply to any transmitter which is type accepted by the Commission for licensing under this part on the frequency or frequencies concerned.

(4) Except in event of distress, use of the frequency 2206 kc in the Great Lakes area by ship stations of the United States is prohibited.

(5) The frequency 2182 kc is authorized for use on a shared basis primarily by ship stations and secondarily by coast stations.

(6) The frequency 2214 kc is authorized for use exclusively at locations at which interference is not caused to the service of any United States Government station.

(7) The frequencies 2638 kc and 2738 kc are authorized for use on a shared basis with ship stations of other countries, for the purposes hereinafter prescribed in this subpart. Use of these frequencies for ship-shore communication in certain geographic areas in accordance with this subpart is authorized upon the express condition that harmful interference shall not be caused to intership communication on these frequencies, nor to the service of any station which, in the discretion of the Commission, has priority on the frequency or frequencies to which interference results: *Provided,* That in respect to stations of the maritime mobile service, this condition shall not be construed as prohibiting the operation of ship stations for authorized ship-shore communication on this frequency pursuant to the provisions of §§ 8.176, 8.177 (b), 8.179 and 8.180.

(8) Use of the frequencies 4067 and 4372.4 kc in the Mississippi River system is authorized upon the express condition that interference shall not be caused to the service of any station which may have priority on the frequency or frequencies used for the service to which interference is caused.

(9) Use of the frequencies 6240 kc and 6455 kc is authorized in the Mississippi River system upon the express condition that interference shall not be caused to the service of any station which may have priority on the frequency or frequencies used for the service to which interference is caused. In order to avoid such interference, transmission on these frequencies during the period from 8:00 p. m. until 5:00 a. m., c. s. t., is prohibited.

(10) [Reserved]

(11) The frequency 8205.5 kc is authorized for use on the Mississippi River and connecting inland waters (except the Great Lakes) upon the express condition that transmission on this frequency during the period from 8:00 p. m. until 5:00 a. m., c. s. t. is prohibited.

(12) Each carrier frequency which is not to be used prior to a specified beginning date, may be used under appropriate station authorization for test transmission during a period commencing not more than two months in advance of such specified beginning date; solely to determine whether an existing ship station is capable of proper technical operation on that particular radiochannel preparatory to the conduct of a normal service thereon: *Provided,* That harmful interference is not caused by such test transmission to the service of any other station.

(e) In addition to the frequencies shown in paragraph (a) of this section other frequencies may be authorized temporarily for the purpose of facilitating the implementation of the Agreement concluded at the Extraordinary Administrative Radio Conference, Geneva, 1951.

§ 8.352 *Frequencies for use in distress.* (a) The frequency 2182 kc is the international radiotelephone distress frequency for the maritime mobile service. Subject to the provisions of paragraph (b) of this section, it may be used for this purpose by ship or aircraft stations employing telephony in the band 1605 to 2850 kc when requesting assistance from the maritime services. It may be used, preferably with class A3 emission, for the distress call and distress traffic.

(b) Until such time as the frequency 2182 kc becomes guarded effectively for distress calls in United States areas other than the Great Lakes region, ship stations using telephony in event of distress only may call stations of the United States Coast Guard on the Government frequency 2670 kc. Transmission on the Government frequency 2670 kc for any purpose other than distress is strictly forbidden. In the Great Lakes region, the distress frequency 2182 kc is to be used at all times for radiotelephone distress calls and traffic.

NOTE: In the Great Lakes region, the frequency 2182 kc has been in use as the general radiotelephone calling frequency for several years, and its use in time of distress in that area has proven effective.

§ 8.353 *Frequencies for calling.* (a) The international general radio-telephone calling frequency for the maritime mobile service is 2182 kc. It may be used as a carrier frequency for this purpose by ship stations and aircraft stations operating in the maritime mobile service:

(1) In addition this frequency may be used for transmission of:

(i) The international urgency signal, and very urgent messages (preceded by this signal) concerning the safety of a ship, aircraft, or other vehicle, or the safety of some person on board or within sight of such ship, aircraft, or vehicle.

(ii) The international safety signal, and messages (preceded by this signal) concerning the safety of navigation or giving important meteorological warnings.

(iii) Brief radio operating signals.

(iv) Brief test signals in accordance with the provisions of § 8.365, as may be necessary to determine whether the radio transmitting equipment of the station is in good working condition on this frequency.

(2) When using this frequency for purposes other than distress calls and distress traffic, and urgency and safety signals and messages, the mean antenna power of the unmodulated carrier wave shall not exceed 100 watts.

NOTE: As prescribed in paragraph 2, Article 3, of the Inter-American Radio Agreement, Washington, 1949, Article 1, paragraph 63 of the International Radio Regulations, Atlantic City, 1947, states as follows: "Mean power of a radio transmitter: The power supplied to the antenna during normal operation, averaged over a time sufficiently long compared to the period corresponding to the lowest frequency encountered in actual modulation." (In general, a time of one-tenth second, during which the mean power is a maximum, will be selected.)

(b) The frequency 156.8 Mc is the international radiotelephone frequency for calling, safety, intership, and harbor control purposes, for the maritime mobile service using frequencies within the band 156.25 Mc to 162.05 Mc. Use of this frequency by ship stations of the United States, however, is subject to the provisions of § 8.359 (c).

§ 8.354 *Frequencies below 5000 kc for public correspondence.* (a) Carrier frequencies which are authorized for use by public ship stations employing telephony by means of amplitude modulation for the transmission of public correspondence exclusively are designated herewith; ship stations shall use the radiochannels of which these frequencies are the authorized carrier frequencies exclusively for working with public coast stations located at, or in the vicinity of, the specific harbors, ports or places designated hereinafter opposite the respective ship transmitting frequency, and shall receive transmission from the particular coast stations on the associated receiving frequencies also designated herewith:

(1) Frequencies available for use when the mobile station and the coast station transmit alternately on different radio channels:

For communication with coast stations located in the vicinity of—	Mobile station transmitting carrier frequency [1]		Associated coast station carrier frequency	
	Frequency (kc)	Specific limitations imposed upon availability for use [2]	Frequency (kc)	Specific conditions relating to use of these frequencies by coast stations for transmission as shown in § 7.306 (b) of this chapter [2]
Boston, Mass.	2406	None	2506	None.
	2158	Day only; available until Nov. 1, 1955, on condition that harmful interference is not caused to the service of any government station operating on this frequency or any adjacent frequency.	2550	Day only; available until Nov. 1, 1955, on condition that harmful interference is not caused to the service of any government station operating on this frequency or any adjacent frequency.
	2366	Temporarily day only beginning Nov. 1, 1955, as replacement for 2158 kc. Beginning May 1, 1956, no limitation with respect to hours of use.	2450	Temporarily day only beginning Nov. 1, 1955, as replacement for 2550 kc. Beginning May 1, 1956, no limitation with respect to hours of use.
New York, N. Y.	2126	None	2522	None.
	2198	None	2590	None.
	2382	Available on condition that harmful interference is not caused to the service of any ship station which is within 300 nautical miles of New Orleans, La., and is transmitting on this frequency to a coast station located in the vicinity of that port.	2482	Available on condition that harmful interference is not caused to the service of any coast station located in the vicinity of New Orleans, La., to which this carrier frequency is assigned for transmission.
	2166	None	2558	None.
	4087.7	None	4393.1	None.
	4129.1	Available for use annually during period Dec. 15 to Mar. 15.	4434.5	Available for use annually during period Dec. 15 to Mar. 15.
	4101.5	None	4406.9	None.
Wilmington, Del.	2166	None	2558	None.
Baltimore, Md.	2166	None	2558	None.
Norfolk-Quantico, Va.	2142	None	2538	None.
Charleston, S. C.-Jacksonville, Fla.	2390	None	2566	None.
Miami, Fla.	2031.5	Available beginning Dec. 15, 1956, on a 24-hour basis.	2490	Available beginning Dec. 15, 1956, on a 24-hour basis on condition that harmful interference shall not be caused to the police radio service in southern California.
	2118	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and beginning Apr. 1, 1957, day only from Apr. 1 to Dec. 15, annually; and, also on condition that harmful interference shall not be caused to the service of any ship station in the Great Lakes area which in the discretion of the Commission has priority on the frequency or frequencies used for the service to which interference is caused.	2514	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and beginning Apr. 1, 1957, day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference shall not be caused to the service of any coast station located in the vicinity of Miami, Fla., to which the carrier frequency 2490 is assigned for transmission; and also on condition that harmful interference shall not be caused to the service of any coast station in the Great Lakes area which in the discretion of the Commission has priority on the frequency or frequencies used for the service to which interference is caused.
	2158	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference is not caused to the service of any ship station which is within 300 nautical miles of Tampa, Fla., and is transmitting on this frequency to a coast station located in the vicinity of that port.	2550	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Tampa, Fla., to which this carrier frequency is assigned for transmission.
	4122.2	None	4427.6	None.
Tampa, Fla.	2009	Available beginning Dec. 15, 1957, on a 24-hour basis.	2466	Available beginning Dec. 15, 1957, on a 24-hour basis.
	2158	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and beginning Apr. 1, 1958, day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference shall not be caused to the service of any ship station in the Great Lakes area, which in the discretion of the Commission, has priority on the frequency or frequencies used for the service to which interference is caused.	2550	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and beginning Apr. 1, 1958, day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference shall not be caused to the service of any coast station in the Great Lakes area, which in the discretion of the Commission, has priority on the frequency or frequencies used for the service to which interference is caused.
Mobile, Ala.	2572 2430	Not available after Dec. 31, 1955 None	}2572	None.
New Orleans, La.	2206	None	2598	None.
	2166	Day only	2558	Day only; also on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Mobile, Ala., to which the carrier frequency 2572 kc is assigned for transmission.
	2382	None	2482	None.
Galveston, Tex.	2134	None	2530	None.
	2366	Day only; on condition that harmful interference is not caused to the service of any ship station which is within 300 nautical miles of Boston, Mass., and is transmitting on this frequency to a coast station located in the vicinity of that port.[3]	2450	Day only; on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Boston, Mass., San Francisco, or Eureka, Calif., to which this carrier frequency is assigned for transmission.[3]

See footnotes at end of table.

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[1] These frequencies are those which may be designated in applications for ship station authorizations.

For communication with coast stations located in the vicinity of—	Mobile station transmitting carrier frequency [1]		Associated coast station carrier frequency	
	Frequency (kc)	Specific limitations imposed upon availability for use [2]	Frequency (kc)	Specific conditions relating to use of these frequencies by coast stations for transmission as shown in § 7.306 (b) of this chapter [2]
San Juan, P. R.	2134	None	2530	None.
Great Lakes.	2158	None	2550	Subject to applicable provisions of § 7.304 (d).
	2118	None	2514	Subject to applicable provisions of § 7.304 (d).
	4115.3	None	4420.7	None.
	4129.1	None	4434.5	None.
Los Angeles-San Diego, Calif.	2009	None	2566	None.
	2382	Available beginning on a date to be designated; on condition that harmful interference is not caused to the service of any ship station which is within 300 nautical miles of New Orleans, La., and is transmitting on this frequency to a coast station located in the vicinity of that port.[3]	2466	Available beginning on a date to be designated; on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Tampa, Fla., to which this carrier frequency is assigned for transmission.[3]
	2206	7 a. m. to 7 p. m., P. s. t., only	2598	7 a. m. to 7 p. m., P. s. t., only.
	2126	7 a. m. to 7 p. m., P. s. t., only	2522	7 a. m. to 7 p. m., P. s. t., only.
San Francisco-Eureka, Calif.	2406	None	2506	None.
	2003	Available on condition that harmful interference shall not be caused to the service of any ship station which is within 300 nautical miles of Los Angeles or San Diego, Calif., and is transmitting on 2,009 kc to a coast station located in the vicinity of those ports.	2450	Available on condition that harmful interference is not caused to police radio service in Kansas or Wisconsin.
	2142	7 a. m. to 7 p. m. P. s. t. only	2538	7 a. m. to 7 p. m. P. s. t. only.
	4067	None	4372.4	None.
Astoria-Portland, Oreg.	2206	None	2598	None.
	2009	7 a. m. to 7 p. m. P. s. t. only	2566	7 a. m. to 7 p. m. P. s. t. only.
Seattle, Wash.	2126	None	2522	None.
	2430	Authorized for use south of 51° north latitude and east of 142° west longitude exclusively [5] during the following daily periods on condition that harmful interference is not caused to the service of any station in the Alaska area authorized in accordance with Part 14 of the Commission's Rules to which this carrier frequency is assigned for transmission: from Oct. 1, 1956, until May 1, 1957, from 8 a. m. to 6 p. m., P. s. t., only; [5] thereafter and annually from Apr. 1 to Sept. 30, inclusive, from 5 a. m. to 9 p. m., P. s. t., only; and annually from Oct. 1 to Mar. 31, inclusive, from 6 a. m. to 11 p. m., P. s. t., only.	2482	Authorized for use during the following daily periods on condition that harmful interference is not caused to the service of any coast station located in the vicinity of New Orleans, La., nor to the service of any station in the Alaska area authorized in accordance with Part 14 of the Commission's Rules to which this carrier frequency is assigned for transmission: from Oct. 1, 1956, until May 1, 1957, from 8 a. m. to 6 p. m., P. s. t., only; thereafter and annually from Apr. 1 to Sept. 30, inclusive, from 5 a. m. to 9 p. m., P. s. t., only; and annually from Oct. 1 to Mar. 31, inclusive, from 6 a. m. to 11 p. m., P. s. t., only.
Kahuku, T. H.	2134	None	2530	None.
	4115.3	None	4420.7	None.
Hilo, T. H.	2198	None	2582	None.
Palmyra Island, T. H.	2134	Available on condition that harmful interference shall not be caused to the service of any ship station which is within 300 nautical miles of Kahuku, T. H., and is transmitting on this frequency to a coast station located in the vicinity of that port.	2530	Available on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Kahuku, T. H., to which the carrier frequency 2530 kc is assigned for transmission.

[1] These frequencies are those which may be designated in applications for ship station authorizations.

[2] With respect to each specific date set forth herein, the associated limitation or condition imposed shall terminate or begin as applicable, at 3 a. m. eastern standard time.

[3] This carrier frequency is to be made available by the Commission, for use (on a 24-hour basis except where specific hours of use are designated) by the maritime mobile service for ship-shore communication in respect to the particular coast station areas designated herein, on a specific beginning date to be designated in future rule-making as soon as practicable after its use (or the use of its associated transmitting or receiving frequency) by other radio services is terminated or is reduced to the extent necessary to avoid harmful interference to or from the maritime mobile service.

[5] During certain hours within this time period ship stations (when north of Vancouver, B. C. and transmitting on 2430 kc to Seattle) may cause some interference to stations in southeastern Alaska.

(2) Frequencies available for use when the mobile station and the coast station transmit alternately on the same radio channel:

For communication with coast stations located in the vicinity of—	Carrier frequency (kc) [1]	Specific limitations imposed upon availability for use
Chicago, Ill.; Pittsburgh, Pa.; Louisville, Ky.; St. Louis, Mo.; Memphis, Tenn.; and other locations as required to serve vessels on the Mississippi River and connecting inland waters (other than the Great Lakes).	2782	None.
	4067	Subject to applicable provisions of paragraph (d) of § 8.351.
	4372.4	Do.
Mobile, Ala.	2572	Not available for ship stations after Dec. 31, 1955.
Lake Dallas, Tex.; Lake Texhoma, Tex.	2738	None.
Lake Mead, Nev., and other locations as required to serve vessels on inland waters of the southwestern continental United States.	2782	The use of this frequency in areas other than Lake Mead, Nev., is subject to the condition that harmful interference is not caused to the service of any other station.
The Dalles, Oreg.; Umatilla, Oreg.; and other locations as required to serve vessels on inland waters of the northwestern continental United States.	2784	The use of this frequency other than in the vicinity of The Dalles, Oreg., and Umatilla, Oreg., is subject to the condition that harmful interference is not caused to the service of any other station.

[1] These frequencies are those which may be designated in applications for ship station authorizations.

(b) Subject to the specific limitations and conditions imposed in this paragraph and as applicable in § 8.351, the carrier frequency 2638 kc is authorized as a working frequency for public ship stations for communication with public coast stations by means of telephony when the ship station and the coast station transmit alternately on this frequency: *Provided*, That:

(1) (i) For each ship station licensed to transmit on 2638 kc for ship-to-ship communication, this additional authorization is valid only if written request therefor is included in the respective application on file with the Commission for regular ship station license or for modification of license;

(ii) The applicant has stated specifically in such application for the purpose expressed in § 8.301 (a) (1) that operation on 2638 kc is intended, in addition to other authorized use, for communication with one or more public coast stations authorized by the Commission for such operation and identified by the applicant;

(iii) Such application contains a description of the procedure or method to be used by the ship station licensee to assure compliance with the provisions of subparagraph (2) of this paragraph;

NOTE: The information required by this subparagraph may be submitted on a separate sheet attached to the completed official application form. Coast stations with which communication on 2638 kc is authorized in accordance with the provisions of this paragraph are designated in notices issued periodically by the Commission, copies of which may be obtained by each ship station licensee involved. Additionally, a listing of such notices, current to the latest practicable date, is appended to this part (§ 8.804).

(2) Use of the frequency 2638 kc for communication with public coast stations shall be confined exclusively to safety and operational communication (see § 8.6 (a), (d) (f), (g), (h) and (m)). Except for safety communication, operation on this frequency for ship-shore communication shall be limited to day only (see § 8.2 (l)): *Provided*, That daily operation with respect to operational communication may be continued beyond this time to the extent necessary for compliance with the provisions of § 8.183;

(3) Operation on the frequency 2638 kc for ship-shore communication as provided in this paragraph shall be limited to those situations in which the use of any other authorized working frequency would be impracticable or ineffective for this purpose;

(4) Except in event of distress, use of the frequency 2638 kc by stations on board aircraft for communication with coast stations is not authorized by any provisions of this paragraph.

(c) The use of the working frequencies authorized in paragraphs (a) and (b) of this section is subject to the applicable conditions and limitations set forth in § 8.351 (d). Further, and insofar as is practicable, ship stations shall use frequency assignments within the band 4000 kc to 5000 kc only when frequency assignments below 4000 kc or above 30 Mc will not provide effective communication.

§ 8.355 *Frequencies from 5000 kc to 30 Mc for public correspondence.* (a) Carrier frequencies within the band 5000 kc to 30 Mc which are authorized for use by public ship stations employing telephony by means of amplitude modulation for the transmission of public correspondence exclusively are designated herewith; ship stations shall use the radio-channels of which these frequencies are the authorized carrier frequencies exclusively for working with public coast stations:

(1) Frequencies authorized for use by ship stations on board oceangoing vessels primarily for long-distance communication, when the ship station and the coast station transmit alternately on different radio-channels; except as expressly provided otherwise in this subpart, these frequencies shall not be used by ship stations on the Great Lakes or inland waters of the continental United States:

Ship station transmitting carrier frequency [1] (kc)	For communication with coast stations located in the vicinity of—	Ship station receiving carrier frequency (kc)
8198.4	San Francisco, Calif.	8747.6
8212.6	Hawaii	8761.8
8219.7	New York, N. Y.	8768.9
8262.3	New York, N. Y.	8811.5
12357.3	New York, N. Y.	13157.5
12372.7	Hawaii	13172.9
12380.4	San Francisco, Calif.	13180.6
12395.8	New York, N. Y.	13196.0
16471.9	Hawaii	17302.1
16487.3	New York, N. Y.	17317.5
16510.4	San Francisco, Calif.	17340.6
16525.8	New York, N. Y.	17356.0
22027.3	New York, N. Y.	22677.5
22042.7	San Francisco, Calif.	22692.9
22065.8	New York, N. Y.	22716.0

[1] These frequencies are those which may be designated in applications for ship station authorizations.

(2) Frequencies authorized for use by ship stations on board vessels while navigated on the Great Lakes; exclusively for communication with coast stations in the Great Lakes area, when the ship station and the coast station transmit alternately on different radio-channels. Ship stations shall receive transmission from the particular coast stations on the associated receiving frequencies also designated herewith:

Ship station transmitting carrier frequency	*Ship station receiving carrier frequency*
8248.1 kc	8797.3 kc

(3) Frequencies authorized for use by ship stations on board vessels while navigated on the Mississippi River and connecting inland waters (other than the Great Lakes); exclusively for communication with coast stations located in the vicinity of any harbor, port, or place on the Mississippi River and connecting inland waters (other than the Great Lakes), when the ship station and the coast stations transmit alternately on the same radio-channel:

6240 kc 6455 kc 8205.5 kc

(b) The use of the working frequencies authorized in paragraph (a) of this section is subject to the applicable conditions and limitations set forth in § 8.351 (d). Further, insofar as is practicable, ship stations shall use frequency assignments within the band 5000 kc to 30 Mc only when frequency assignments below 5000 kc or above 30 Mc will not provide effective communication.

§ 8.356 *Frequencies above 30 Mc for public correspondence.* (a) Carrier frequencies above 156 Mc which are authorized for use by public ship stations employing telephony by means of frequency modulation (or in Regions 1 and 3, amplitude modulation when required) for the transmission of public correspondence exclusively, are designated herewith; ship stations shall use the radio-channels of which these frequencies are the authorized carrier frequencies exclusively for working with public coast stations:

(1) For ship station transmission to public coast station when the same radio-channel is used for transmission by the coast station (under exceptional circumstances wherein the method of working prescribed in subparagraph (2) of this paragraph would not be practicable) in areas where interference is not caused to the use of any of these frequencies by ship stations working as contemplated under subparagraph (2) of this paragraph:

157.3 Mc 157.35 Mc 157.4 Mc

(2) For transmission to public coast stations when a different radio-channel is used for transmission by the coast station:

For ship station transmission (Mc):	*For ship station reception (Mc)*
157.30	161.90
157.35	161.95
157.40	162.00

(3) In respect to coast stations of the United States, the frequency 157.35 Mc may be used only for communication with any public coast station which has been authorized to operate on the associated coast station frequency 161.95 Mc under the provisions of § 7.308 (d).

(b) (1) Carrier frequencies within the band 30 Mc to 40 Mc which, subject to and in accordance with the conditions and limitations hereinafter set forth in this paragraph are authorized for use by public ship stations employing telephony by means of either frequency modulation or amplitude modulation for transmission and reception of public correspondence exclusively on the same radio-channel, only when communicating with public coast stations licensed to transmit on frequencies within this band prior to the effective date of this section and located within the vicinity of the respective harbor(s), port(s), or place(s) designated herein opposite the particular carrier frequency.

Carrier frequency:	*For communication only with coast stations within the vicinity of—*
35.14 Mc	Philadelphia, Pa.
35.18 Mc	Great Lakes region.

(2) Each of these carrier frequencies is available for use on a shared basis with limited coast stations, limited ship stations, marine-utility stations and aircraft stations operating in the maritime mobile service at any location on the same radio-channel; they are not available exclusively for public correspondence. Licensees having authority to transmit on these frequences shall cooperate in the use thereof in order to minimize interference.

(3) Applicants for public ship station licenses or renewal or modification of such licenses whose applications request authority to transmit on 35.14 Mc or 35.18 Mc for the purpose of communicating with public coast stations as specifically set forth in this section, may be required, in the discretion of the Commission, to show a need for the use of such frequencies for public correspondence in lieu of the specific frequencies above 156 Mc authorized in this subpart for public correspondence exclusively.

(4) Ship stations (except stations operating under appropriate licenses granted prior to July 23, 1951) shall not use the carrier frequencies 35.14 Mc or 35.18 Mc for public correspondence unless such stations are specifically authorized to do so by the terms of the respective ship station license. Notwithstanding the provisions of Subpart M of this part, ship stations shall not be classified as public ship stations because of their authority to transmit on 35.14 Mc and/or 35.18 Mc, unless they are specifically authorized by the terms of their station licenses to use these carrier frequencies for public correspondence as prescribed in this section.

§ 8.357 *Additional frequencies for public correspondence.* In addition to the radio channels designated in this part or in the license of a public ship station for public correspondence by means of telephony, such station, when working by telephony with a foreign coast station for this purpose may, on condition that interference shall not be caused to the service of any station which in the discretion of the Commission may have priority on the involved radio-channel(s), transmit to such coast station when directed to do so by that station on a specific frequency assignment designated by the coast station for the service being carried on.

§ 8.358 *Frequencies below 3000 kc for safety purposes.* (a) Carrier frequencies below 3000 kc authorized for working between ship stations employing telephony for transmission and reception on the same radio-channel by means of amplitude modulation, primarily for safety communication, are designated herewith. The transmission of other than safety communication on these radio-channels is restricted to operational communication, except that commercial transport vessels and vessels of municipal or State governments may use these frequencies for ship business purposes as well as operational communication. The transmission of such operational and business communication is authorized upon condition that interference is not caused to safety communication. The use of these carrier frequencies is prohibited when the use of a licensed frequency above 30 Mc in lieu thereof would provide effective communication. Their use shall be in accordance with respective geographic areas as follows:

Frequency (kc):	*Geographic area in which use is authorized*
2003	Great Lakes only.
2738	All areas except the Great Lakes and the Gulf of Mexico.
2830	The Gulf of Mexico.
2638	All areas.

(b) [Reserved]

(c) The geographic limitations relating to the frequencies 2738 kc and 2830 kc shall not apply in event of distress or emergency nor shall they prohibit ship-to-ship communication over any distance less than 200 statute miles when only one of the ship stations is within a geographic area in which use of the respective frequency is permissible.

§ 8.359 *Frequencies above 156 Mc for safety purposes.* (a) Carrier frequencies which are authorized for use by ship stations and by marine-utility stations on board ship, employing telephony for transmission and reception on the same radio-channel by means of frequency modulation (or by means of amplitude modulation in Regions 1 and 3 when required) primarily for the transmission of safety communication, are designated herewith:

156.8 Mc: For calling and safety; available for any ship station or marine-utility station on board ship in any area.

156.3 Mc: For intership (ship-to-ship) communication exclusively; available for any ship station or marine-utility station on board ship in any area.

156.7 Mc: In areas other than the Great Lakes—primarily for communication with limited coast stations for the exchange of information essential to the maritime radiolocation service; in the Great Lakes area—for intership (ship-to-ship) communication exclusively. Available for any ship station or marine-utility station on board ship in any area.

157.0 Mc: For intership (ship-to-ship) communication exclusively; for this purpose available only for ship stations and marine-utility stations on board commercial transport vessels and vessels of municipal or state governments for use exclusively on the Great Lakes, the Mississippi River and tributaries, and the Gulf of Mexico Intracoastal Waterway.

The use of these carrier frequencies for public correspondence (except as may be required for communication with foreign coast stations) is prohibited. Further, their use by ship stations is subject to the conditions and limitations set forth in paragraphs (b) through (f) of this section.

(b) The carrier frequency 156.7 Mc or 157.0 Mc is assignable to ship stations and marine-utility stations on board ship, for ship-to-ship communication on the Great Lakes (and 157.0 Mc on the Mississippi River and tributaries, and the Gulf of Mexico Intracoastal Waterway), only when such stations are capable also of transmitting and receiving on the intership radio-channel of which 156.3 Mc is the authorized carrier frequency, and are authorized to communicate on that radio-channel. (One application, however, may be submitted when this requirement is fulfilled, for ship station license for initial authority to transmit for this purpose on 156.3 Mc and either 156.7 Mc or 157.0 Mc or both the latter frequencies.) The requirement of this paragraph shall not apply to a marine-utility station when the ship station on board the same vessel complies therewith.

(c) (1) The radio-channel of which 156.8 Mc is the authorized carrier frequency is designated primarily for calling and safety purposes in ship-to-ship and ship-shore communication. It may be used when appropriate by ship stations and marine-utility stations on board ship employing telephony for short-distance communication as an alternative to the radiotelephone distress frequency 2182 kc, for distress calls and distress traffic, and for safety communication.

(2) In accordance with the provisions of subparagraph (1) of this paragraph, this radio-channel may be used by ship stations and marine-utility stations on board ship for:

(i) Call, reply, and the exchange of brief operating signals;

(ii) Operating signals preparatory to message traffic on a different radio-channel;

(iii) The transmission from ship to ship of brief messages within the category of safety communication.

(3) The use of this radio-channel by ship stations, or marine-utility stations on board ship, for transmission not strictly in accordance with subparagraphs (1) and (2) of this paragraph is prohibited unless the stations engaged in communication are in the open sea and more than 150 nautical miles from the nearest land. Under the latter circumstances, this radio-channel may be used for ship-to-ship communication of any nature necessary for the safe, expeditious or economical operation of ships.

(d) The radio-channel of which 156.3 Mc is the authorized carrier frequency is designated for intership (ship-to-ship) communication exclusively. When a ship station or a marine-utility station on board ship is authorized to transmit on one radio-channel only (within the frequency-band 156.25 Mc to 157.45 Mc) exclusively for intership communication, the authorized carrier frequency of such intership radio-channel shall, in all cases, be 156.3 Mc: *Provided*, This condition shall not apply to a marine-utility station on board ship when the ship station on board the same vessel is authorized to transmit on the assigned frequency 156.3 Mc. This radio-channel may be used:

(1) Primarily for safety communication and the exchange of signals and messages of direct benefit to marine navigation;

(2) Secondarily, and with discretion, for other communication concerning the safe, expeditious or economical operation of ships.

(e) The radio-channel of which 157.0 Mc is the authorized carrier frequency is designated, with respect to its use by ship stations and marine-utility stations on board ship on the Great Lakes, Mississippi River and tributaries, and the Gulf of Mexico Intracoastal Waterway, exclusively for intership communications. Its use for intership communication is authorized for stations on board commercial transport vessels and vessels of municipal or state governments only. For intership communication, this radio-channel may be used:

(1) Primarily for safety communication and the exchange of signals and messages of direct benefit to marine navigation;

(2) Secondarily, and with discretion, for other communication concerning the safe, expeditious or economical operation of ships.

(f) (1) Except in the Great Lakes area, the radio-channel of which 156.7 Mc is the authorized carrier frequency is designated primarily for communication with limited coast stations when such communication is essential to the effective operation of any maritime radiolocation service which is available to all ships within the radiolocation service area. In areas where this carrier frequency is assigned for this function, its use as a communication facility for purposes of radiolocation shall have absolute priority over any other use except for distress. In areas (other than the Great Lakes) where the use of this carrier frequency for communication essential to radiolocation is not required, or is not required continuously, it may be assigned and used for any communication of benefit to the operation of commercial transport vessels, subject to the express condition that interference shall not be caused to its primary use in connection with the maritime radiolocation service.

(2) In the Great Lakes area only, the radio-channel of which 156.7 Mc is the authorized carrier frequency is designated for intership (ship-to-ship) communication exclusively. It may be used for stations on board any class of vessel for safety communication and communication necessary for the operational and business needs of ships.

§ 8.360 *Frequencies above 156 Mc for business and operational purposes.* (a) Carrier frequencies which are authorized for use by ship stations and marine-utility stations employing telephony by means of frequency modulation (or amplitude modulation in Regions 1 and 3 when required) for transmission and reception on the same radio-channel, are designated herewith; these carrier frequencies (except where intership use only is specified) are authorized primarily for communication with limited coast stations and marine-utility stations on shore, and secondarily with ship stations and marine-utility stations on board ship:

156.4 Mc: All areas.[1]
156.5 Mc: All areas.[1]
156.6 Mc: All areas;[1] except that on Great Lakes limited to intership and communication with government stations concerning passage of vessels through locks.
156.9 Mc: All areas.
157.0 Mc: All areas, except not available for ship-shore communication on the Great Lakes, the Mississippi River or any tributary thereof, the Gulf of Mexico Intracoastal Waterway, nor any location within 100 statute miles of any portion of these waters.

The use of these carrier frequencies for public correspondence (except as may be required for communication with foreign coast stations) is prohibited. Further, their use by ship stations is subject to the conditions and limitations set forth in paragraphs (b) through (i) of this section.

(b) Each of the radio-channels of which the frequencies designated in paragraph (a) of this section are the authorized carrier frequencies is available on a shared basis only to serve the business and operational needs of ships and they shall not be construed as available for the exclusive use of any one station licensee or any specific ship or ships. All licensees having authority to transmit on such assigned frequencies shall cooperate in the use thereof in order to minimize interference and obtain the most effective use of the authorized facilities.

(c) For all areas other than the Great Lakes area, the carrier frequency of each radio-channel which is assignable to a ship station or a marine-utility station on board a specified class or classes of ships or for a specified function is designated herewith:

(1) For assignment to ship stations on board commercial transport vessels and vessels of municipal or state governments which are navigated primarily within harbor or port areas:

156.4 Mc 156.5 Mc

157.0 Mc subject to the limitation specified in paragraph (a) of this section.

(2) For assignment to ship stations on board commercial transport vessels and vessels of municipal or state governments which are navigated primarily between separate harbors or ports or navigated primarily outside harbor or port areas:

156.5 Mc

When such vessels have need for an additional radio-channel for use within harbor or port areas, one or more of the carrier frequencies specified in other subparagraphs of this paragraph may be additionally assigned.

(3) For assignment to ship stations on board any class of vessel for communication solely in connection with harbor or port operations, including docking, lighterage, pilotage, dredging, towing, ship repair, port development, maintenance of navigable channels, and for communication concerning the passage of vessels through locks under governmental control:

156.6 Mc

(4) For assignment primarily to ship stations on board pilot vessels, normally stationed at the entrance to a harbor or port, and secondarily for assignment to other classes of commercial transport vessels for use in each case in accordance with the provisions of paragraph (f) of this section:

156.9 Mc

(d) For the Great Lakes area only, the carrier frequency of each radio-channel which is assignable to a ship station or a marine-utility station on board a specified class or classes of ships or for a specified function is designated herewith:

(1) For assignment to ship stations on board commercial transport vessels and vessels of municipal or state governments, which are used regularly to transport passengers and/or land vehicles (including motor vehicles and railroad rolling stock) between established marine terminals:

156.4 Mc

(2) For assignment to ship stations on board commercial transport vessels and vessels of municipal or state governments which are navigated primarily between separate harbors or ports or navigated primarily outside harbor or port areas and commercial transport vessels used in the fishing industry:

156.5 Mc

(3) For assignment to ship stations on board commercial transport vessels and vessels of municipal or state governments which are used in marine construction activities:

156.5 Mc

(4) For assignment to ship stations on board any class of vessel for communication between tugboats and between tugboats and other vessels concerning the maneuvering of ships and docking operations primarily in harbor or port areas and for communication with government stations concerning the passage of vessels through locks under governmental control:

156.6 Mc

(5) For assignment to ship stations on board commercial transport vessels and vessels of municipal or state governments which are classified as tugs or tugboats:

156.9 Mc

(e) The carrier frequency 156.6 Mc is authorized for use within, or within the vicinity of, all harbor or port areas primarily for communication concerning port operations; in such areas it may be used additionally, on a secondary basis, to serve other business and operational needs of ships upon the express condition that such secondary use shall not interfere with nor delay the exchange of port operational message traffic.

(f) The carrier frequency 156.9 Mc is authorized primarily for use by pilot vessels, normally stationed at the entrance to a harbor or port, that regularly supply information (via one or more limited coast stations using this carrier frequency for such communication) to marine interests on shore concerning the arrival and departure of ships moving to and from that harbor or port. This carrier frequency may be assigned, in areas where its use is not required for the foregoing purpose, for any communication of benefit to the operation of commercial transport vessels.

(g) In order to avoid interference in certain geographic areas to the use of an exclusive intership radio-channel of which 157.0 Mc is the authorized carrier frequency, the use of this carrier frequency for ship-shore communication is prohibited (except for distress purposes) on the Great Lakes, the Mississippi River and tributaries, the Gulf of Mexico Intracoastal Waterway, and at any location within 100 statute miles of any portion of those waters.

(h) All communication on any radio-channel of which 156.4 Mc, 156.5 Mc, 156.6 Mc, 156.9 Mc, or 157.0 Mc is the authorized carrier frequency shall be limited solely to safety communication and communication necessary for the operational and business needs of ships; in particular, communication of a personal nature not relative to safety or the operational or business needs of ships is strictly forbidden. Whenever these radio-channels are used on a secondary basis for ship-to-ship communication, such use shall not willfully interfere with nor delay any communication between ship and shore.

(i) Notwithstanding any of the provisions of this section, any radio-channel of which 156.4 Mc, 156.5 Mc, 156.6 Mc, 156.9 Mc, or 157.0 Mc is the authorized carrier frequency may be used for ship-to-ship communication of any nature necessary for the safe, expeditious or economical operation of ships when the stations engaged in communication are in the open sea and more than 150 nautical miles from the nearest land.

§ 8.361 *Frequencies within the band 30 to 50 Mc for general communication.* (a) Carrier frequencies which are authorized for any communication necessary for the safe, expeditious or economical operation of ships (other than public correspondence) for use by ship stations and marine-utility stations on board ship employing either frequency modulation or amplitude modulation for telephony, for transmission and reception on the same radio-channel are designated herewith:

Carrier frequency:	*Normal geographic area of use*
35.06 Mc	Gulf-Caribbean area north of 15° north latitude (includes Puerto Rico and Virgin Islands, does not include Florida east coast area).
35.10 Mc	Pacific area within Region 2 and north of 15° north latitude.
35.14 Mc	Atlantic area within Region 2 and north of 15° north latitude (includes Florida east coast area).
35.18 Mc	Mid-continent area (includes Great Lakes).

Each of these assignable frequencies is available on a shared basis only and shall not be construed as available for the exclusive use of any one station licensee. All licensees having authority to transmit on such assigned frequencies shall cooperate in the use thereof in order to minimize interference and obtain the most effective use of the authorized facilities.

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[1] In accordance with arrangements between the United States and certain foreign countries.

(b) Each application which requests assignment of a carrier frequency designated in paragraph (a) of this section shall designate normally the carrier frequency specified in that paragraph for use in the geographic area in which the station is to be operated. Normally, only that carrier frequency is assignable for use in that area. When any other of these carrier frequencies is requested for assignment in a specified area, the application therefor shall include a satisfactory showing that the carrier frequency designated in paragraph (a) of this section for use in the particular area will not meet the need of the proposed or existing service. When, in the opinion of the applicant, the location of the involved station is not, or will not be, clearly within one of the geographic areas designated in paragraph (a) of this section, the applicant shall obtain the necessary information in this respect by corresponding directly with the Commission at Washington, D. C.

(c) Each of these carrier frequencies is assignable for communication (other than public correspondence) by means of telephony with limited coast stations, ship stations, and marine-utility stations on ship or shore, which for this purpose transmit on the same radio-channel. In addition, when required to serve a maritime purpose, each of these carrier frequencies is assignable in accordance with the geographic areas specified in paragraph (a) of this section for use by mobile stations on board aircraft at sea for communication by telephony with ship stations, limited coast stations, and marine-utility stations on board ship, when each of the involved stations transmits and receives on the same radio-channel; subject to this provision, ship stations and marine-utility stations are authorized to communicate additionally on such radio-channel(s) with mobile stations on board aircraft appropriately licensed for this purpose. Such stations on board aircraft shall be governed in the use of any of these frequency assignments by the same rules and regulations that apply to ship stations using the same frequency assignment.

(d) The carrier frequency 43.02 Mc may be authorized for use by ship stations employing telephony by means of either amplitude modulation or frequency modulation for ship-to-ship communication exclusively at locations or in areas (primarily outside the continental United States) where, as the result of transmission by ship stations on the radio-channel of which this frequency is the authorized carrier frequency, interference is not caused to any other service operating on the same or adjacent radio-channels.

§ 8.362 *Frequencies below 3000 kc for business, operational and safety purposes.* (a) The frequencies 2738 kc, 2830 kc and 2214 kc may be utilized on a shared basis with other ship stations for business and operational communication with limited coast stations if the limited coast station, in accordance with the applicable provisions of § 7.365 of this chapter, has been specifically authorized to engage in such communication: *Provided,* That:

(1) With respect to the frequency 2214 kc, specific authorization for such use must be obtained, in which event intership use of the frequency between such ship stations is also authorized.

(2) Use of any of these frequencies will be subject to the same conditions under which they are authorized to be used by limited coast stations under the provisions of § 7.365 of this chapter.

(b) [Reserved]

(c) [Reserved]

(d) (1) In addition to availability of the carrier frequencies 2738 kc, and 2830 kc, primarily for intership communication as prescribed in § 8.358, either of these carrier frequencies may, in response to proper application therefor, be specifically authorized in private aircraft station licenses for communication (in areas where their use is authorized for ship stations using telephony as prescribed in § 8.358) by means of telephony (amplitude modulation) with a ship station or stations: *Provided,*

(i) The applicant makes a showing satisfactory to the Commission that such communication is necessary to serve an important business or operational need of each particular ship while such ship is engaged in commercial fishing activities in the open sea or on any bay, sound, strait, or comparable waters adjacent to the open sea; and

(ii) Harmful interference is not caused to ship-to-ship communications; and

(iii) The maximum plate input power used for such communication shall not exceed 50 watts; and

(iv) The aircraft-to-ship and ship-to-aircraft communication which takes place on the radio-channel of which either 2738 kc or 2830 kc is the authorized carrier frequency shall be limited exclusively to that which is necessary to serve an important business or operational need of the vessel on which the ship station is located while such vessel is engaged in commercial fishing activities in the open sea or on any bay, sound, strait, or comparable waters adjacent to the open sea; and

(v) Except as otherwise provided in this paragraph, all of the provisions of this part in respect to authorization and use of the carrier frequencies 2738 kc and 2830 kc for ship-to-ship communication shall apply to all aircraft stations when operating under the provisions of this paragraph.

(2) As an alternative to one of the specific carrier frequencies designated in subparagraph (1) of this paragraph, the carrier frequency 2638 kc may be authorized in accordance with all other provisions of this paragraph only in behalf of those private aircraft stations which were licensed prior to July 23, 1951, to transmit on this carrier frequency for communication by telephony with ship stations for the purpose expressed in this paragraph.

§ 8.363 *Use of U. S. Government frequencies for telephony.* (a) In addition to use of the frequency assignment designated for telephony in the license of a ship station, such station when communicating by telephony with a mobile or land station of the United States Government, may transmit on a government frequency assignment when authorized or directed to do so by the government station responsible or by the government department or agency for which use of such frequency assignment is authorized; on condition that the emission-bandwidth and frequency tolerance of the ship station shall be within the respective limits thereof required to be maintained by the government station. Under these circumstances, the ship station carrier frequency, the class of emission, and the permissible class of traffic shall be designated and controlled by the responsible government station, department, or agency.

(b) Frequencies assigned to government radio stations are assignable to non-Government ship radio stations for communication with other non-Government stations by telephony when such communication is necessary in connection with activities performed in coordination with or in behalf of the Federal Government and where the Commission determines, after consultation with the appropriate government agency or agencies, that such assignment is necessary.

§ 8.364 *Identification of station.* (a) All radiotelephone emission of a ship station or a marine-utility station on board a ship shall be clearly identified by transmission therefrom in the English language of the official call sign assigned to that station by the Commission; provided that, in lieu of identification of the station by voice, the official call sign may be clearly transmitted by tone-modulated telegraphy in the International Morse Code either by a duly licensed radiotelegraph operator or by means of an automatic device approved for this purpose by the Commission. This identification shall be made:

(1) At the beginning and upon completion of each communication with any other station;

(2) At the beginning and upon conclusion of each transmission made for any other purpose; and

(3) At intervals not exceeding 15 minutes whenever transmission is sustained for a period exceeding 15 minutes.

(b) When an official call sign is not assigned by the Commission to a ship station using telephony, the complete name of the ship on which the station is located and the name of the licensee shall be transmitted by voice in the English language for the purpose of station identification.

(c) The provisions of paragraphs (a) and (b) of this section shall apply also to ship stations of portable nature when using telephony and operated on board ship pursuant to §§ 8.40 and 8.71.

§ 8.365 *Procedure in testing.* (a) Ship stations must use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the testing procedure described below shall be followed:

(1) The licensed radio operator or other person responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress; if they are likely to interfere with the working of a coast or aeronautical station in the vicinity of the ship station, the consent of the former station(s) must be obtained before the test emissions occur;

(2) The official call sign of the testing station, followed by the word "test", shall be announced on the radio-channel being used for the test, as a warning that test emissions are about to be made on that frequency;

(3) If, as a result of the announcement prescribed in subparagraph (2) of this paragraph, any station transmits by voice the word "wait", testing shall be suspended. When, after an appropriate interval of time, such announcement is repeated and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in subparagraph (4) of this paragraph;

(4) The operator shall announce the word "testing" followed in the case of a voice transmission test by the count "1, 2, 3, 4, * * * etc." or by test phrases or sentences not in conflict with normal operating signals; or followed, in the case of other emission, by appropriate test signals not in conflict with normal operating signals. The test signals in either case shall have a duration not exceeding ten seconds. At the conclusion of the test, there shall be voice announcement of the official call sign of the testing station, the name of the ship on which the station is located, and the general location of the ship at the time the test is being made. This test transmission shall not be repeated until a period of at least one minute has elapsed; on the frequency 2182 kc or 156.8 Mc in a region of heavy traffic, a period of at least five minutes shall elapse before the test transmission is repeated.

(b) When testing is conducted on any frequency assignment within the band 2170 kc to 2194 kc, within the band 156.75 Mc to 156.85 Mc, within the band 480 kc to 510 kc (lifeboat transmitters only), or within the band 8362 kc to 8366 kc (lifeboat transmitters only), no test transmissions shall occur which are likely to actuate any automatic alarm receiver within range. Lifeboat stations using telephony shall not be tested on the assigned frequency 500 kc during the 500 kc silent periods.

§ 8.366 *General radiotelephone operating procedure*—(a) *Limitations on calling*. (1) Except when transmitting a general call to all stations within range for announcing or preceding the transmission of distress, urgency, or safety messages, a ship station shall call the particular station(s) with which it intends to communicate.

(2) Calling a particular station, either by voice or by automatic means, shall not continue for a period of more than thirty seconds in each instance. If the called station is not heard to reply, that station shall not again be called until after an interval of one minute. In event of an emergency involving safety, the provisions of this subparagraph shall not apply.

(3) The use of selective-calling on the radio-channel of which either 2182 kc or 156.8 Mc is the authorized carrier frequency is prohibited.

(b) *Use of calling frequency required*. (1) Except when other operating procedure is used to expedite safety communication or is established in advance by and between the stations concerned, ship stations in the Great Lakes area, before transmitting on the intership radio-channel of which 2003 kc is the authorized carrier frequency, shall first establish communication with each other by initially calling and answering on the calling channel of which 2182 kc is the authorized carrier frequency.

(2) Except when other operating procedure is used to expedite safety communication or is established in advance by and between the stations concerned, ship stations, before transmitting on the intership radio-channel of which 2638, 2738, or 2830 kc is the authorized carrier frequency, shall first establish communication with each other by initially calling and answering on the calling channel of which 2182 kc is the authorized carrier frequency.

(3) Except when other operating procedure is used to expedite safety communication or is established in advance by and between the stations concerned, the radio-channel of which 156.8 Mc is the authorized carrier frequency shall be used for call and reply by ship stations and marine-utility stations on board ship before establishing ship-to-ship communication on the radio-channel of which the authorized carrier frequency is, in all areas, 156.3 Mc; in the Great Lakes area 156.7 Mc or 157.0 Mc; and on the Mississippi River and tributaries and the Gulf of Mexico Intracoastal Waterway 157.0 Mc: *Provided*, That this requirement shall not apply to marine-utility stations or other stations of portable nature which are not capable of a plate input power in excess of three watts and are not capable of being readily adjusted for operation on more than one radio-channel.

(c) *Calling coast stations*. (1) Use of the carrier frequency 2182 kc by ship stations for calling coast stations, and for replying to calls from such stations is authorized; however, such calls and replies shall, in general, be made on a ship-shore radio-channel authorized primarily for working.

(2) Use of the carrier frequency 156.8 Mc by ship stations and marine-utility stations on board ship for calling coast stations and marine-utility stations on shore, and for replying to calls from such stations is authorized; however, such calls and replies shall, in general, be made on a ship-shore radio-channel authorized primarily for working.

(d) *Time limitation on calling frequencies and adjacent working frequencies*. (1) Transmission by ship stations on the calling channel of which 2182 kc or 156.8 Mc is the authorized carrier frequency (including calls, answers, operating signals, and conversation pertaining to safety) shall be kept to a minimum and in general any one exchange of communications shall not exceed 3 minutes in duration. In the event of distress or other emergency, this time limitation shall not apply.

(2) Transmission by ship stations, when in Region I, is prohibited on any frequency (including 2182 kc) in the band 2167–2197 kc during the two three-minute periods in each hour which commence at xh00 and xh30, Greenwich mean time (G. m. t.); *Provided*, That this requirement is not applicable to the transmission of distress signals, distress traffic, urgency and safety signals, and messages preceded by the urgency or safety signal.

(e) *Change to working frequency*. After establishing communication with another station by call and reply on the calling channel of which 2182 kc or 156.8 Mc is the authorized carrier frequency, stations on board ship shall change to an authorized working channel for the transmission of messages which, under the provisions of this subpart, cannot be transmitted on the respective calling channels.

(f) *Shared use of 2003, 2638, 2738, and 2830 kc*. (1) In regions of heavy radio traffic, any one exchange of communications between any two mobile stations on the radio-channel of which 2003, 2638, 2738, or 2830 kc is the authorized carrier frequency, or between a ship station and a limited coast station on the 2738 or 2830 kc channel, shall not exceed 5 minutes in duration after the two stations have established contact by calling and answering. Subsequent to such exchange of communications, the 2003, 2638, 2738, or 2830 kc channel shall not be used again for communication between the same two stations until 5 minutes have elapsed: *Provided*, That this requirement shall in no way limit or delay the transmission of distress or emergency communications.

(2) All transmission on the radio-channels of which 2003, 2638, 2738 and 2830 kc are the authorized carrier frequencies by two or more stations, engaged in any one exchange of signals or communications with each other, shall take place on only one of these channels. For this purpose, the stations involved shall transmit and receive on the same channel: *Provided*, That this requirement is waived in the event of emergency when by reason of interference or limitation of equipment this method of single-channel communication cannot be used.

(g) *Authorized use of 2003, 2638, 2738 and 2830 kc*. The radio channels of which 2003, 2638, 2738 and 2830 kc are the authorized carrier frequencies, shall be used for communication between mobile stations in accordance with the provisions of §§ 8.176, 8.177 (b) and 8.358.

(h) *Limitation on business and operational traffic*. All ship-to-ship communication and communication with limited coast stations and marine-utility stations on shore engaged in by ship stations and marine-utility stations on board ship shall be limited, on radiochannels above 30 Mc, to the minimum practicable transmission time. In the conduct of ship-shore communication (other than distress), stations on board ship shall comply with instructions given by the limited coast station or marine-utility station on shore, with which they are communicating, in all matters relative to operating practices and procedures and to the suspension of transmission in order to minimize interference.

§ 8.367 *Station documents.* (a) Ship stations using telephony, but not authorized to employ telegraphy except for calling purposes incidental to the use of telephony, shall be provided with the documents hereinafter specified:

(1) Ship stations on board vessels engaged on international voyages other than those voyages designated in subparagraph (2) of this paragraph:

(i) A valid station license;

(ii) The necessary operator license or licenses;

(iii) The station log required by this part for stations of this category;

(iv) The Alphabetical List of Call Signs;

(v) The List of Coast Stations and Ship Stations;

(vi) Part 8 of this chapter.

(2) Ship stations on board vessels not navigated on international voyages or engaged on international voyages solely on inland waters of the United States and Canada, including the Great Lakes; the documents listed in subparagraph (1) (i), (ii), (iii) and (vi) of this paragraph.

§ 8.368 *Station records.* (a) Ship stations using telephony shall maintain an accurate radio telephone log during their hours of service, as hereinafter specified:

(1) Each sheet of the log shall be numbered in sequence and shall include the name of the vessel, official call sign of the ship station, and the signature of the licensed operator (or other person in accordance with § 8.155) who is responsible for operation of the radiotelephone transmitting apparatus. The use of initials or signs in lieu of the operator's signature is not authorized.

(2) Except as provided otherwise in subparagraph (3) of this paragraph, the date and time of making each entry shall be shown opposite the entry and the time shall be expressed in Greenwich mean time (G. m. t.) as follows: The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation "G. m. t." shall be marked at the head of the column in which the time is entered.

(3) As an alternative to the use of Greenwich mean time in making entries as specified in subparagraph (2) of this paragraph, ship stations on board vessels not engaged on international voyages or while navigated on the Great Lakes or inland waters of the United States, may express the time of each entry in local standard time (e. s. t., c. s. t., etc., counted from 0000 to 2400 o'clock, beginning at midnight), with the appropriate abbreviation "e. s. t," "c. s. t.," etc., entered at the head of the column in which time is entered: *Provided,* That in the Great Lakes area, eastern standard time (e. s. t.) exclusively may be used as the only alternative to Greenwich mean time. The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation.

NOTE: For example, 7:01 p. m. eastern standard time would be entered as 1901 e. s. t.: 7:30 a. m. eastern standard time would be entered as 0730 e. s. t.: 7:45 p. m. eastern standard time would be entered as 1945 e. s. t.

(4) Except when transmission occurs on a frequency above 30 Mc and the ship station is on inland waters of the United States other than in the Great Lakes area, all radiotelephone distress, urgency or safety signals and communications made or intercepted; a summary, if possible, of such communications; and any information which may appear to be of importance to maritime safety shall be entered, together with the time of such observation or occurrence, identification of the radio-channel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined. In addition, the ship's own position and the distance from the distressed ship or other mobile unit, if obtainable, shall be entered. These entries shall be made by a licensed operator or by a member of the crew who is designated and authorized by the master to do so; the signature of the person(s) making the entries shall appear in the log and shall be properly related to each particular entry for this purpose.

(5) With respect to ship stations which, by reason of the provisions of § 8.202, § 8.203 or § 8.223, are required to keep a watch on the radiotelephone calling and distress frequency, 2182 kc, entries shall be made showing each time this watch is begun, suspended, or concluded, without any requirement, however, of making entries solely to show interruption of this listening due to authorized communication with other stations. The required entries shall be made by a licensed operator or by any member of the crew who is designated and authorized by the master to do so; the signature of each person making these entries and each person who actually maintains such watch shall appear in the log and shall be properly related to each particular entry for this purpose.

(6) A summary of communications exchanged between the ship station and mobile stations or land stations (except public coast stations in the United States) shall be entered when:

(i) Communication with a foreign station occurs; or

(ii) Transmission occurs on a radio-channel below 30 Mc; or

(iii) Transmission occurs on a frequency above 30 Mc and the ship station is within the territorial waters of a foreign country (except in the Great Lakes area) or is at sea within less than 150 nautical miles of a foreign country; or

(iv) The entries prescribed in this subparagraph shall be made by a licensed operator or by a member of the crew who is designated and authorized by the master to do so; the signature of the person(s) making the entries shall appear in the log and shall be properly related to each particular entry for this purpose.

(7) An entry shall be made giving pertinent details of all installations, service, or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless such operator is regularly employed on a full-time basis at the station and his operator license is properly posted, such entry shall include his mail address and the class, serial number, and expiration date of his operator license.

(8) In the case of ship stations required to be equipped for radiotelephony by reason of the provisions of Part II of Title III of the Communications Act or the radio provisions of the Safety Convention, the following additional entries shall be made by a qualified operator or by any member of the crew who is designated and authorized by the master to do so; the signature of each person making these entries shall appear in the log and be properly related to the particular entry:

(i) The time when storage batteries provided as a part of the required radiotelephone installation are placed on charge and taken off charge.

(ii) Results of any tests of the required radiotelephone installation including hydrometer readings of lead-acid storage batteries and voltage readings of other types of batteries provided as part of that installation.

(iii) A daily entry showing the operating condition of the required radiotelephone equipment as determined by either normal communication or the test communication required by § 8.534.

(iv) Results of inspections and tests made pursuant to § 8.520 (g) of any lifeboat radio equipment which is compulsorily provided in compliance with requirements of law.

(b) Marine-utility stations on board ship shall maintain an accurate radiotelephone log during their hours of service as follows:

(1) Each sheet of the log shall be numbered in sequence, shall include the general geographic area of navigation of the vessel upon which the station is operated, the name of the vessel, official call sign of the marine-utility station and the signature of the licensed operator (or other person in accordance with § 8.155) who is responsible for operation of the marine-utility station (the use of initials or signs in lieu of signatures is not authorized).

(2) Appropriate entries shall be made in the log giving pertinent details of all installations, service, or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless such operator is regularly employed on a full time basis at the station

and his operator license is properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(c) With respect to ship stations of the United States subject to the Great Lakes Agreement, entries required by paragraph (a) of this section shall be made by an officer or crew member on board who has been certified as required by Article 7 of the Agreement, or by a person on duty listening as required by Article 7 of the Agreement, or by a licensed or certificated deck officer. The log shall include the name (and title if held) of the person making an entry properly related to each entry. Entries shall be made as soon as practicable after the observed occurrence, and the time thereof shall be specified in eastern standard time. The station log required by paragraph (a) shall include the following additional entries:

(1) The official number of the vessel;

(2) The name and radio certificate number of each officer and crew member assigned to the vessel who has been certified as required by Article 7 of the Great Lakes Agreement and designated by the Master to operate the radiotelephone installation;

(3) A record of charging of any storage batteries which are necessary for the proper operation of the required radiotelephone installation;

(4) A daily record of the results of the determination of the operating condition of the radiotelephone installation required by § 8.541.

§ 8.369 *Operation under interim ship station license.* (a) The use and operation of a station on board ship under the authority conferred by an interim ship station license shall be subject to and in accordance with all applicable rules of the Commission: *Provided*, That the class of station, the use of frequencies, the class of emission, and the transmitting equipment shall be limited at all times under such license to the authorization hereinafter designated:

(1) Class of ship station;

(i) Public, if equipped to operate on one or more of the frequencies designated by this section for transmission to public coast stations;

(ii) Limited, if not equipped to operate as prescribed in subdivision (i) of this subparagraph.

(2) Authorized carrier frequencies:

(i) 2182 kc for calling and distress; 156.8 Mc for calling and safety communication;

(ii) For ship-to-ship communication:

2638 kc and 156.3 Mc: For use in all areas;
2738 kc: For use in all areas except the Great Lakes and the Gulf of Mexico; provided that, unless the transmitter is type accepted under this part for licensing on this frequency or a certification in accordance with § 8.351 (d) has been submitted, use of the frequency is limited to test purposes as set forth in § 8.351 (d);
2830 kc: For use in the Gulf of Mexico; provided, that, unless the transmitter is type accepted under this part for licensing on this frequency or a certification in accordance with § 8.351 (d) has been submitted, use of the frequency is limited to test purposes as set forth in § 8.351 (d);
2003 kc: For use in the Great Lakes area, exclusively.

(iii) For communication between ships and public coast stations:

Frequencies below 30 Mc as set forth in §§ 8.354 and 8.355;
Frequencies above 156 Mc as set forth in § 8.356 (a) and § 14.260 (b) of this chapter.

(iv) In addition in the Alaska area:

1622 kc: For communication between ship stations aboard vessels of less than 500 gross tons and for communication between public ship stations on board vessels of any size and public coast stations;

2134 kc: For communication between ship stations and coast stations of the Alaska Communication System open to public correspondence;

2382 kc: For communication between ship stations aboard vessels of 500 gross tons or more and for communication between public ship stations on board vessels of any size and public coast stations.

(3) Authorized classes of emission. A3 on frequencies herein designated below 30 Mc; F3 on frequencies herein designated above 156 Mc; and for brief operating signals A2 and F2 respectively.

(4) Equipment: The equipment shall be the same as the particular equipment which is described in the related formal application simultaneously filed at the Field Office for regular ship station license or modification of license, and which is capable of being operated with class A3 or F3 emission (according to the frequency band to be used under the provisions of this section) in accordance with all applicable rules and regulations on one or more radio-channels of which the authorized carrier frequencies are designated by this section.

SUBPART P—USE OF RADIOLOCATION

§ 8.401 *Assignable frequencies for direction-finding.* (a) The frequency 410 kc is the assigned frequency for direction finding.

(b) As an exception, on condition that signals of distress, urgency and safety, and calls and answers, are not interfered with, the calling channel of which 500 kc is the assigned frequency may be used additionally and with discretion, by ship stations for direction-finding; exclusively in Regions 1 and 3 outside areas of heavy radio traffic.

(c) In the event of distress, the following frequencies may be used for radiolocation for purposes of search and rescue by any licensed station on board ship, without regard to whether or not these frequencies are designated in the station license:

410 kc 2182 kc
500 kc 8364 kc

§ 8.402 *Use of direction-finding frequency.* Except in event of distress, transmission on the direction-finding frequency (410 kc as designated in § 8.401) is permissible only when authorized by the terms of the station license. The operating procedure used shall comply with that set forth in the International Radio Regulations applicable to the use of this frequency; the exchange of signals and communications on this frequency by means of radiotelegraphy which is a necessary adjunct to direction-finding, together with the actual process of direction-finding, constitutes a maritime radionavigation service.

§ 8.403 *Radiolocation by cable-repair ship.* Provided radio transmitting equipment attached to a cable-marker buoy has been adequately described in an application for ship radio station license for a cable-repair ship with which the buoy is associated, and provided further that such equipment is authorized in the related ship station license, that equipment may be operated (outside the territorial waters of a foreign country) on such radio-channels within the band 285–325 kc (285–315 Mc only in Region 1) as may be expressly authorized in each case by the Commission under authority of the ship station license, with A1 or A2 emission and a maximum plate input power of 30 watts, *Provided*, That interference shall not be caused by such operation to any maritime radionavigation service. The call-signals that must be used for a transmitter operating under the provisions of this section shall be the regularly assigned call of the ship station with which the buoy is associated, to be followed by the letters "BT", and the identifying number of the buoy. The buoy transmitter shall be continuously monitored by a licensed radiotelegraph operator on board the associated cable-repair ship. Should a frequency deviation in excess of 0.5 percent or interference to the service of any other station be reported or observed, the radiation of the transmitter shall be suspended until the deviation is eliminated or until the transmitter can be operated without causing interference.

§ 8.404 *Assignable frequencies above 2400 Mc.* (a) The following frequency-bands are authorized for use by ship-radionavigation stations (including ship-radar stations) in the maritime radionavigation service (the associated transmitting freqencies of U. S. Government radar beacons (racons) are, respectively, as follows: 3256, 5450, and 9310 megacycles); the maximum power shall be designated in each instrument of authorization: *Provided*, That for stations other than ship-radar stations, the class of emission, the frequency tolerance, and the bandwidth occupied by the emission shall be designated in each instrument of authorization.

3000 Mc to 3246 Mc
5460 Mc to 5650 Mc
9320 Mc to 9500 Mc

(b) The following frequency-bands are authorized for use by ship-radiolocation stations in the maritime radiolocation service; the class of emission, the frequency tolerance, the bandwidth occupied by the emission, and the maximum power shall be designated in each instrument of authorization:

(1) 2450 to 2500 Mc for purposes other than radionavigation or safety, on the condition that harmful interference shall not be caused to the fixed and mobile services, on the condition that no protection shall be given from interference caused by emission from industrial, scientific, or medical equipment.

(2) 3000 Mc to 3246 Mc
5460 Mc to 5650 Mc
9320 Mc to 9500 Mc

The use of frequencies within these bands for radiolocation, other than radionavigation, shall not cause harmful interference to the radionavigation service.

§ 8.405 *Special provisions applicable to ship-radar stations.* (a) Every ship-radar station licensed, prior to the effective date of this section, in the former "ship service" shall, subsequent to the effective date of this section, be regarded as licensed in the maritime radionavigation service and the use and operation of such stations shall be governed accordingly.

(b) Each ship-radar station installation the manufacture of which was completed on or after 1947 shall be furnished with a durable name plate with the manufacturer's name, transmitter model number; and month and year of completion of manufacture permanently inscribed thereon. Such name plate shall be affixed to the indicator housing at the principal radar operating position or to some other component of the radar installation which is readily accessible for inspection.

(c) Each ship-radar station license issued shall be subject to the condition that the station licensee, in relation to the proper operation of the station in accordance with the radio law, and rules and regulations of the Commission, will be represented on board the radar-equipped vessel by the person who at any given time occupies the position of master.

(d) The following provisions shall apply to ship-radar stations:

(1) The station licensee of each ship-radar station shall provide and require to be kept at the station a permanent installation and maintenance record. Entries in this record shall be made by or under the personal direction of the responsible installation, service, or maintenance operator concerned in each particular instance, but the station licensee shall have joint responsibility with the responsible operator concerned for the faithful and accurate making of such entries as are required by this paragraph.

(2) Each entry in this record shall be personally signed by the responsible operator concerned.

(3) The following entries shall be made in this record:

(i) The date and place of initial installation.

(ii) Any necessary steps taken to remedy any interference found to exist at the time of such installation.

(iii) The nature of any complaint (including interference to radio communication) arising subsequent to initial installation, and the date thereof.

(iv) The reason for the trouble leading to the complaint, including the name of any component or component part which failed or was misadjusted.

(v) Remedial measures taken, and date thereof.

(vi) The name, license number, and date of the ship-radar operator endorsement on the first or second class radio operator license of the responsible operator performing or immediately supervising the installation, servicing, or maintenance.

(e) Until the Commission shall otherwise provide, the ship-radar station licensee, by such arrangement as may be necessary with the ship master, operating agency, or ship owner, shall, upon specific request made by the Commission, be responsible for the submission of such reports as are requested by the Commission to show the value and practical performance of the ship-radar station. For assistance in preparing these reports, daily records, when the radar installation is tested or used, should, when practicable, be kept showing at least the following:

(1) Approximate number of hours of use while the ship is in operation;

(2) Number of service failures, and duration, nature, and cause of each failure if known;

(3) Performance under local weather conditions which are unfavorable for marine navigation; and

(4) Unusual incidents, including, among others, cases in which radar may have aided or hindered safe operation of the ship.

(f) In addition to the installation and maintenance record required by paragraphs (d) and (e) of this section, the following documents shall be available for reference on board each radar-equipped vessel whose ship-radar station is licensed by the Commission:

(1) Part 8 of this chapter.

(2) At least one set of instructions from the respective manufacturer relative to the use and operation of the particular type of ship-radar installation.

(g) No provisions of this part shall require any ship-radar station to transmit any signal(s) intended solely for the purpose of identifying that station.

SUBPART Q—DEVELOPMENTAL STATIONS

§ 8.431 *Supplemental eligibility.* An authorization for developmental operation of a station on board ship in any of the services under this part will be issued only to those persons who are eligible to operate such stations on a regular basis.

§ 8.432 *Showing and statement required.* (a) Except as provided in paragraph (c) of this section, each application for authorization for a developmental station on board ship shall be accompanied by a showing that:

(1) The applicant has an organized plan of development leading to a specific objective;

(2) A point has been reached in the program where actual transmission by radio is essential to the further progress thereof;

(3) The program has reasonable promise of substantial contribution to the expansion or extension of the use of radio for a maritime purpose, or is in a field of maritime operation not already investigated;

(4) The program will be conducted by qualified personnel;

(5) The applicant is legally and financially qualified, and possesses adequate technical facilities for conduct of the program proposed;

(6) The public interest, convenience, or necessity will be served by the proposed operation.

(b) Every application for authority to engage in developmental operation shall be accompanied by a statement signed by the applicant in which it is agreed that any authorization issued pursuant thereto will be accepted with the express understanding of the applicant that it is subject to change in any of its terms or to cancellation in its entirety at any time, upon reasonable notice but without a hearing, if, in the opinion of the Commission, circumstances should so require.

(c) The provisions of paragraph (a) of this section do not apply when an application is made for a developmental station solely for the reason that the frequency requested is restricted to such developmental use.

§ 8.433 *Assignable frequencies.* (a) Stations engaged in developmental operation may be authorized to use a frequency or frequencies, available for the service and class of station which they propose to operate. The number of frequencies assignable to a particular station shall depend upon the specific requirements of the developmental program and the number of frequencies available for such use in the particular area where the station is to be operated.

(b) In addition to the specific frequencies and frequency-band designated in this part as available for a particular service and class of station, each of the following frequencies and frequency-bands available for the maritime mobile service may be licensed as an assigned frequency or as an authorized frequency-band, respectively, for use by developmental ship stations subject to the applicable provisions of this part:

3,500 Mc to 3,700 Mc
6,425 Mc to 6,575 Mc
11,700 Mc to 12,200 Mc
26,000 Mc to 30,000 Mc

and

16,000 Mc to 18,000 Mc
2,450 Mc to 2,500 Mc

on the condition that no protection shall be given from interference caused by emissions from industrial, scientific, or medical equipment. The class of emission, the frequency tolerance, the emission-bandwidth and the maximum transmitter-power for use on frequencies within these bands above 2400 Mc shall be designated in each station authorization.

(c) In addition to specific frequency bands designated by § 8.404 for ship radionavigation stations, each of the following frequencies or frequency bands may be licensed as an assigned frequency or an authorized frequency band for use by developmental ship radionavigation stations:

Authorized frequency band	*Assigned frequency*
2900 to 3000 Mc.	
3246 to 3266 Mc	3256 Mc (Racons only).
3266 to 3300 Mc.	
5250 to 5440 Mc.	
5440 to 5460 Mc	5450 Mc (Racons only).
8500 to 9300 Mc.	
9300 to 9320 Mc	9310 Mc (Racons only).
9500 to 9800 Mc.	

§ 8.434 *Use of developmental stations.* (a) Developmental stations on board ship shall be constructed and used in such manner as to conform with all applicable technical and operating requirements contained in this part, unless deviation therefrom is specifically provided in the station authorization.

NOTE: Such requirements are those applicable to the corresponding established class of station including provisions relating to operator requirements, station records, station documents and assignments of call signs.

(b) Communication with any station of a country other than the United States is prohibited unless specifically authorized by the terms of the station authorization.

(c) The operation of a developmental station is subject to the condition that harmful interference is not caused to the operation of stations licensed in an established service under any part of the Commission's rules.

§ 8.435 *Developmental program.* (a) The developmental program as described by the applicant in the application for authorization shall be substantially followed unless the Commission shall otherwise direct.

(b) Where some phases of the developmental program are not covered by the general rules of the Commission and the rules in this part, the Commission may specify supplemental or additional requirements or conditions in each case as deemed necessary in the public interest, convenience or necessity.

(c) The Commission may, from time to time, require a station engaged in developmental work to conduct special tests which are reasonable and desirable to the authorized developmental program.

§ 8.436 *Report of operation required.* (a) A report on the results of the developmental program shall be filed with and made a part of each application for renewal authorization, or in cases where no renewal of authorization is requested, such report shall be filed within 60 days of the expiration of such authorization. Matters which the applicant does not wish to disclose publicly may be so labelled; they will be used solely for the Commission's information and will not be publicly disclosed without permission of the applicant. The report shall include comprehensive and detailed information on the following:

(1) The final objective of the developmental operation;

(2) Pertinent results of operation to date;

(3) Analysis of the results obtained;

(4) Copies of any published reports;

(5) Need for continuation of the program if such need exists;

(6) Number of hours of operation on each authorized frequency during the term of the license to the date of the report.

§ 8.437 *Identification of station.* (a) The radiotelegraph and radiotelephone emissions of a developmental station on board ship shall be clearly identified in the manner provided in §§ 8.326 and 8.364, respectively.

(b) The facsimile emissions of a developmental station on board ship shall be identified either by telegraphy or by telephony as provided in §§ 8.326 and 8.364, respectively.

(c) All other classes of emission of a developmental station on board ship shall be identified as prescribed in the respective station authorization.

SUBPART R—COMPULSORY SHIPBOARD RADIO INSTALLATIONS

§ 8.501 *Inspection of installation.* (a) In accordance with § 8.101 (a) and pursuant to section 362 of the Communications Act, every ship of the United States, subject to Part II of Title III of the Communications Act, shall have the equipment and apparatus prescribed therein, inspected at least once each year by the Commission. The issuance of an appropriate certificate (see section 361 of the Communications Act) in behalf of any vessel of the United States concerning the radio particulars provided for in the Safety Convention is subject to a finding by the Commission that such vessel complies in an efficient manner with the applicable radio and communication provisions of that Convention or that, pursuant to the provisions of the Safety Convention, such vessel is exempt from those provisions of that Convention. The issuance date of Safety Radiotelegraphy and Safety Radio telephony certificates issued by the Commission shall be the date the installation is found to be in compliance or not later than one business day following such in-compliance date.

(b) In accordance with § 8.101 (a) and pursuant to section 385 of the Communications Act, every vessel of the United States subject to Part III of Title III of said Act shall have a periodical inspection by the Commission of the equipment and apparatus prescribed therein not less than once every 24 months. If after such inspection the Commission determines that all relevant provisions of Part III of Title III of the Communications Act, the rules of the Commission made pursuant thereto, and the station license, are complied with in an efficient manner, a Communications Act Safety Radiotelephony certificate will be issued. The issuance date of Communications Act Safety Radiotelephony certificates shall be the date the installation is found by the Commission to be in compliance, or not later than one business day following such in-compliance date. Such certificates shall be issued for a period of not more than 24 months.

(c) In accordance with the Safety Convention, every ship of the United States holding a Safety Certificate, Safety Radiotelegraphy Certificate, Safety Radiotelephony Certificate or Exemption Certificate is subject when in a port of a foreign country which is a party to the Safety Convention, to control by officers duly authorized by the government of that country, insofar as that control is directed towards verifying that there is on board a valid Convention certificate and, if necessary, that the conditions of the vessel's seaworthiness correspond substantially with the particulars of that certificate.

(d) The privileges of the Convention may not be claimed in favor of any ship unless it holds appropriate valid certificates. In the event of control giving rise to intervention of any kind in a foreign port, the officer carrying out the control is required to notify the United States Consul in writing forthwith of all the circumstances in which intervention was deemed to be necessary.

(e) Safety Certificates, Safety Radiotelegraphy Certificates and Safety Radiotelephony Certificates are required, in accordance with the Safety Convention, to be posted in a permanent and accessible place in the ship.

RADIOTELEGRAPH INSTALLATIONS ON SHIPS SUBJECT TO PART II OF TITLE III OF THE COMMUNICATIONS ACT OR ON U. S. SHIPS SUBJECT TO THE SAFETY CONVENTION

§ 8.502 *Main and emergency installations.* (a) A radio installation on board a vessel subject to Title III, Part II of the Communications Act, to be construed as a main installation and a separate emergency or reserve installation, shall comply with the following conditions, in addition to all other requirements:

(1) A main radio transmitter and an associated main radio receiver shall be installed;

(2) A separate emergency radio transmitter and an associated separate emergency radio receiver shall be installed;

(3) Emergency electric lights shall be installed;

(4) An emergency power supply shall be installed.

(5) A main antenna and a separate emergency antenna shall be installed: *Provided, however,* That a cargo ship the keel of which was laid prior to June 1, 1954, may be equipped with either an emergency antenna meeting the requirements of § 8.504 (a) (2) or with a spare antenna, consisting of a single wire transmitting antenna (including suitable insulators) of the same linear dimensions as the main transmitting antenna, completely assembled for immediate replacement.

(b) Whenever a main installation only is provided on board a cargo vessel in accordance with the terms of paragraph (a) of section 355 of the Communications Act, this installation shall comply in full with all rules and regulations of the Commission that apply to an emergency or reserve installation on board a vessel subject to Title III, Part II of the Communications Act.

NOTE: Section 355 (a) of the Communications Act (Title III, Part II) provides that "The radio installation shall comprise a main and an emergency or reserve radiotelegraph installation: *Provided,* That, in the case of an existing installation on a cargo ship and a new installation on a cargo ship of five hundred gross tons and upwards but less than one thousand six hundred gross tons, if the main installation complies with all requirements of an emergency or reserve installation, the emergency or reserve installation may be omitted, except that a separate emergency receiver must, in all cases, be provided".

§ 8.503 *Requirements of main installation.* (a) All main installations on board vessels subject to Title III, Part II of the Communications Act shall comply with the following conditions, in addition to all other requirements:

(1) The main antenna shall be as efficient as is practicable under the prevailing physical limitations and shall be adequately installed and protected so as

to insure proper operation, and so as not to endanger the ship and the required radio installation. For the purpose of insuring adequate protection against failure of the main antenna installation when severe mechanical stress is suddenly applied, an approved "safety link" shall be provided as a component of this installation.

NOTE: A safety link may be described as a device which, under heavy stress, will operate to greatly reduce such stress without breakage of the antenna, the halyards, or any other antenna-supporting elements.

(2) The main transmitter shall be of the electron-tube type and shall be capable of meeting the requirements of § 8.552.

NOTE: Upon proper application and satisfactory demonstration being made, the Commission for the purpose of this regulation will consider approval of transmitters other than those of the electron-tube type, except transmitters employing class B emission.

(3) The main receiver shall be capable of efficiently receiving radiotelegraph signals, classes A1 and A2 emission, on all frequencies within the bands 100 to 200 kilocycles, and 405 to 535 kilocycles, and in addition class B emission within the band 485 to 515 kilocycles. In addition, it shall be fitted with a head receiver capable of effective operation at every audio frequency from 200 to 3000 cycles per second, inclusive. Where a loudspeaker is additionally provided for use in accordance with the provisions of § 8.204, such device also shall be capable of effective operation at every audio frequency from 200 to 3000 cycles per second, inclusive. The main receiver shall have sufficient sensitivity to effectively operate a head receiver or a loudspeaker when the receiver input is as low as 100 microvolts.

(4) There shall be readily available for use at all times under normal load conditions, when the vessel is leaving or attempting to leave a harbor or port for a voyage in the open sea, while being navigated in the open sea outside a harbor or port, and when required during inspection of the ship radio station by an authorized representative of the Commission, a main power supply for the main radio installation capable of supplying electrical power sufficient to energize simultaneously and efficiently the main transmitter at its required antenna power (the antenna power specified in § 8.552) and the main receiver; and at the same time to charge, at any required rate, all storage batteries used as the emergency power supply, and any other storage batteries which are charged by connection to this radio room main power supply. Under this load condition and at all times herein specified, any potential of the main power supply at the radio room terminals shall not deviate from its rated electrical potential by more than 10 percent on vessels completed on or after July 1, 1941, nor by more than 15 percent on vessels completed before that date. While at sea, storage batteries forming part of the main installation shall be brought up to the normal fully charged condition daily.

(5) For the purpose of determining the potential(s) of the main power supply of the main transmitter at its radio room terminals, a suitable voltmeter or voltmeters of approved accuracy shall be permanently installed in the main radio operating room.

(6) The main installation shall be provided with a device permitting change-over from transmission to reception and vice versa without manual switching.

(7) The main installation shall be capable of being quickly connected with either the main antenna or the emergency antenna if installed.

§ 8.504 *Requirements of emergency or reserve installation.* (a) All emergency or reserve installations on board vessels subject to Title III, Part II of the Communications Act shall comply with the following conditions, in addition to all other requirements:

(1) The emergency installation shall be capable of being placed in operation (by a qualified operator who is on duty at the operating location) within a maximum time of 1 minute after the need arises for its use.

(2) The emergency antenna shall be as efficient as is practicable under the prevailing physical limitations and shall be adequately installed and protected so as to insure proper operation in time of an emergency, and so as not to endanger the ship and the required radio installation.

(3) The emergency transmitter shall be of the electron-tube type and shall be capable of meeting the requirements of § 8.553.

(4) The emergency receiver shall be capable of efficiently receiving radiotelegraph signals, classes A1 and A2 emission, on all frequencies within the band 405 to 535 kilocycles, and class B emission on all frequencies within the band 485 to 515 kilocycles. In addition, it shall be fitted with a head receiver capable of effective operation at every audio frequency from 200 to 3000 cycles per second, inclusive. Where a loudspeaker is additionally provided for use in accordance with the provisions of § 8.204, such device also shall be capable of effective operation at every audio frequency from 200 to 3000 cycles per second, inclusive. The emergency receiver shall have sufficient sensitivity to effectively operate a head receiver or a loudspeaker when the receiver input is as low as 100 microvolts.

(5) There shall be readily available for use at all times under normal load conditions, when the vessel is leaving or attempting to leave a harbor or port for a voyage in the open sea, while being navigated in the open sea outside a harbor or port, and when required during inspection of the ship radio station by an authorized representative of the Commission, an emergency power supply for the emergency installation (independent of the propelling power of the ship, and any other electrical system; and independent of the main power supply where a separate main and emergency or reserve installation is provided for the purpose of compliance with paragraph (a) of section 355 of the Communications Act) capable of supplying electrical power sufficient to energize simultaneously and efficiently the emergency transmitter at its required antenna power (the antenna power specified in § 8.553) and the emergency receiver. Such emergency power supply shall be maintained in readiness to operate effectively and shall have a reserve capacity of at least 6 continuous hours at all times while the vessel is navigated outside a harbor or port and whenever the vessel leaves or attempts to leave a harbor or port of the United States for a voyage in the open sea. While at sea, storage batteries forming part of the emergency installation shall be brought up to normal full charged condition daily.

(6) There shall be provided emergency electric lights of not less than 10 watts per unit, capable of being energized solely by the radio installation emergency power supply and connected thereto through individual fuses. These electric lights shall be capable of operation independent of any other electrical system and shall be arranged so as to provide satisfactory illumination of the main and emergency radio operating controls and radio station clock. The emergency lighting electrical circuits shall be arranged so as to avoid the application of excessive voltage to the emergency lights during the charging of any emergency batteries. The provisions of this subparagraph or of § 8.8 (j) shall not preclude the use of any other power supply for energizing these lights solely as an additional provision.

(7) All emergency power supply circuits shall be appropriately fused to afford adequate protection from serious overloads or short-circuits.

(8) No electrical load circuits except those of the emergency installation (includes the required radio station emergency light(s)) shall be connected to the emergency power supply: *Provided*, That an approved automatic-alarm-signal keying device, or the audible warning apparatus associated with an approved auto-alarm receiver, or both, may be connected to that part of the emergency power supply furnishing power to the emergency transmitter: *Provided further*, That the reserve capacity of the emergency power supply shall include the additional capacity required to energize, in a normal manner and to a normal extent, any keying device or audible warning apparatus that may be connected as herein authorized, including sufficient capacity to energize any keying device continuously for a period of one hour.

(9) The emergency power supply shall be located as near to the emergency transmitter and receiver as is practicable: *Provided*, That the location of such power supply complies with all applicable rules and regulations of the United States Coast Guard.

(10) The cooling system of all internal-combustion engines used as part of the emergency power supply shall be adequately protected or treated to prevent freezing or overheating consistent with the season and route to be traveled by the particular vessel involved.

(11) The emergency installation shall be capable of being quickly connected with either the main antenna or the emergency antenna if installed.

(b) (1) The shipowner, operating company, or station licensee, if directed by the Commission or its authorized representative, shall prove by demonstration prescribed in subparagraphs (2), (3), (4) and (5) of this paragraph or by such other means as may be deemed necessary, that the emergency installation satisfies the 6-hour operating requirement of law.

(2) When the emergency power supply, on board a vessel required by law to be equipped with a radio installation, consists of or includes a storage battery, proof of the ability of such battery power supply to operate continuously and effectively over a prescribed period of time is authorized to be established by a discharge test over such prescribed period of time, when supplying power at the voltage required for normal and effective operation, to an electrical load as prescribed by subparagraph (4) of this paragraph.

(3) When the emergency power supply, on board a vessel required by law to be equipped with a radio installation, consists of or includes an engine-driven generator, proof of the adequacy of the engine fuel supply to operate the unit continuously and effectively over a prescribed period of time may be established by using as a basis the fuel consumption during a continuous period of 1 hour when supplying power, at the voltage required for normal and effective operation, to an electrical load as prescribed by subparagraph (4) of this paragraph.

(4) The electrical load to be supplied by an emergency power supply for the purpose of establishing proof of required capacity shall be computed as the sum of all electrical loads presented by all other apparatus of the ship's radio installation which are connected to the emergency power supply under test. Allowances for intermittent use of such apparatus shall be made only in accordance with the following:

(i) The current supplied to the emergency transmitters may be computed as the current supplied when the transmitter is partially energized with the radiotelegraph key open plus one-fourth the difference between the current supplied when such key is open and the current supplied when such key is closed.

(ii) The current drawn by the automatic-alarm-signal keying device specified in paragraph (a) (8) of this section (if such device is connected to the emergency power supply) may be computed as one-sixth of the current supplied when this device is properly energized.

(iii) The current drawn by an audible warning apparatus associated with an approved auto-alarm receiver specified in paragraph (a) (8) of this section may be considered as negligible.

(5) At the conclusion of the tests specified in subparagraphs (2) and (3) of this paragraph, no part of the emergency source of power shall have an excessive temperature rise, nor shall the specific gravity or voltage of the storage battery be below the 90 percent discharge point as determined from information (such as voltage curves or specific gravity tables) supplied by the manufacturer for the type of battery involved.

§ 8.505 *Tests of emergency installation.* (a) On vessels required by law to be equipped with an emergency or reserve installation, the condition of this installation shall be determined by test and actual operation prior to the vessel's departure from each port (but not necessarily more than once each day) and on each day the vessel is outside a harbor or port. It is recognized that in some cases, tank vessels cannot meet this requirement when in port because of the hazardous nature of the cargo being handled. When storage batteries are used as an emergency power supply or are used for the purpose of starting an emergency engine-driven generator, tests shall be made of the charging circuits for polarity and correct charging rate. Hydrometer readings of the electrolyte of a pilot cell and such other cells as are necessary to determine the state of charge of an emergency lead-acid storage battery and voltage readings under normal load as are necessary to determine the state of charge of emergency storage batteries of other types shall be taken. When an engine-driven generator is used as an emergency power supply, a check shall be made of the quantity of fuel in the supply tank.

(b) When an automatic-alarm-signal keying device is installed in accordance with § 8.508, this device shall be operated to determine that it is in efficient operating condition prior to the vessel's departure from each port (but not necessarily more than once each day) and on each day the vessel is outside a harbor or port. To avoid the actual transmission of auto-alarm signals during such test operation, the radiotelegraph transmitter(s) to which this device is connected shall not be energized.

§ 8.506 *Use of emergency installation.* (a) The emergency installation on board a vessel subject to Title III, Part II of the Communications Act, while being navigated in the open sea, is authorized to be used only for safety communication except that it may be used for other communication for a period not to exceed 1 hour per day in the aggregate. However, the emergency receiver and its emergency power supply (if such power supply is a storage battery) may be used at any time to maintain a watch for safety purposes, if such use will not reduce the ability of the emergency power supply to energize the emergency installation for a period of at least 6 consecutive hours.

(b) When more than one storage battery is installed on board a ship for the purpose of providing an emergency power supply in compliance with Title III of Part II of the Communications Act, any one of these batteries may be designated at any time as the required emergency power supply or a part thereof, upon the express condition that such battery, whenever so designated, is capable of energizing (independent of the propelling power of the ship and any other electrical system) the associated component or components of the emergency installation for a period of at least 6 consecutive hours.

(c) The emergency power supply on board a cargo vessel (on which a separate (see § 8.502 (b)) main and emergency installation is not provided), subject to Title III, Part II of the Communications Act, while being navigated in the open sea, is authorized to be used only for safety communication except that it may be used for other communication for a period not to exceed 1 hour per day in the aggregate.

(d) Any storage battery whether or not it is the emergency power supply or a part thereof may be used at any time to maintain a watch for safety purposes upon the express condition that such use will not reduce the ability of the emergency power supply to energize the emergency installation for a period of at least 6 consecutive hours as required by paragraph (f) of section 355 of the Communications Act.

§ 8.507 *Routing of electrical wiring.* The electrical conductors connecting the main (any source of power on board ship that constitutes a main power supply, as defined in § 8.8 (d), while it is being used as that type of power supply) power supply to the main radio installation and the electrical conductors connecting the emergency power supply to the emergency or reserve installation shall be routed so as to afford adequate protection from mechanical injury, shall be adequately protected from overload by fuses, and shall be kept clear of electrical grounds. If, because of the ship's structure, a long, indirect routing is necessary, an additional equivalent circuit shall be provided in each case over an alternate route.

§ 8.508 *Automatic-alarm-signal keying device.* Each ship of the United States, which is subject to Title III, Part II, of the Communications Act shall be fitted with one or more automatic-alarm-signal keying devices of a type approved by the Commission in accordance with § 8.555.

§ 8.509 *Installation of automatic-alarm-signal keying device.* (a) The automatic-alarm-signal keying devices required by § 8.508 shall be installed in an accessible location in the radio room so as to be capable of automatically keying alternatively either the main or the emergency transmitter. When only one automatic-alarm-signal keying device is installed for this purpose, means shall be provided in the radio operating room for instantly using this device to key alternatively either the main transmitter or the emergency transmitter: *Provided*, That whenever one transmitter is employed as both a main and emergency transmitter on board a cargo vessel, this requirement will be satisfied when the automatic-alarm-signal keying device is capable of automatically keying this transmitter only. Only one control shall be provided for starting and stopping each automatic-alarm-signal keying device; this control shall be located in the radio room.

(b) The required automatic-alarm-signal keying device shall be capable of operating automatically for a continuous period of at least 1 hour from a source of power independent of the propelling power of the ship and independent of any source of power other than the emergency power supply or the storage battery used to energize a required automatic-alarm receiver.

(c) Each automatic-alarm-signal keying device installed on board a vessel pursuant to § 8.508, shall be furnished with a durable nameplate bearing type and serial number and the month and year of completion by the manufacturer.

§ 8.510 *Auto-alarm.* (a) An auto-alarm which is installed and used on board a cargo vessel of the United States pursuant to the provisions of § 8.205, shall be a type of auto-alarm approved by the Commission in accordance with paragraph (x) of section 3 of the Communications Act.

(b) The Commission shall be informed in writing on the prescribed form (FCC Form No. 501, available upon request, should be used for this purpose) immediately upon completion of each auto-alarm installation on board any vessel of the United States. Each report shall specify the type of the alarm, the name of the vessel, the call letters and name of the licensee of the ship radio station and the name of the owner and operating company of the vessel.

§ 8.511 *Installation of auto-alarm.* (a) A vessel shall be considered as fitted with an auto-alarm in accordance with the requirements of Title III, Part II of the Communications Act and the radio provisions of the Safety Convention when the auto-alarm is a type approved by the Commission as prescribed by § 8.510 and the auto-alarm installation on board such vessel complies with the conditions prescribed in the following paragraphs of this section.

(b) Each auto-alarm of a type approved by the Commission when first installed on board a vessel of the United States, shall bear an identifying serial number. Two or more principal components of one complete installation shall bear the same number. After the initial installation, if any principal component is entirely replaced, the substitute unit shall bear the serial number of the initial unit but must be identified in addition as a replacement. For this purpose the principal components of the following types of auto-alarms (approved prior to July 23, 1951) are designated as follows:

(1) Radiomarine Corporation of America Models AR-8600 and AR-8600-X auto-alarms. One combined receiver and selector unit, without regard to container; one control and terminal box.

(2) Radiomarine Corporation of America Model AR-8601 auto-alarm. One combined receiver and selector unit, without regard to container; one control and terminal unit.

(3) Mackay Radio and Telegraph Company auto-alarms, Types 101-A and 101-B manufactured by Federal Telegraph Company. One selector unit without regard to container; one receiver unit, without regard to container.

(4) Mackay Radio and Telegraph Company auto-alarm, Type 5001-A. One combined receiver and selector unit, without regard to container.

(c) The auto-alarm shall be located in the main radiotelegraph operating room and shall be adequately installed and protected so as to insure proper operation. Means shall be provided for placing the entire system in or out of operation from the main radiotelegraph operating room. A simple change-over switch shall be provided to (1) disconnect the main antenna from all other equipment and connect it to the auto-alarm receiver and place the auto-alarm system in effective operating condition and conversely (2) de-energize the auto-alarm system and reconnect the main antenna to other equipment. In addition, suitable means of determining the supply voltages are within the limits required for proper operation of the auto-alarm system shall be provided.

(d) Approved apparatus shall be provided for giving an audible warning in the main radiotelegraph operating room, in the radio operator's cabin, and on the navigating bridge. This apparatus shall operate continuously after the auto-alarm has been actuated by an alarm signal or by failure of the auto-alarm system, until manually stopped. Only one switch for stopping the audible warning apparatus from functioning is authorized and this shall be located in the main radiotelegraph operating room and shall be capable of manual operation only.

(e) Failure of the auto-alarm (if of a type approved prior to July 23, 1951) to function normally because of prolonged atmospherics (static) or other prolonged interference, or both, shall operate a visual indicator on the bridge. The type and method of installation of such visual indicator shall comply with requirements of the United States Coast Guard.

(f) When an auto-alarm is dependent for effective operation upon a power supply having a voltage within definite upper and lower limits, such auto-alarm shall be fitted with an auxiliary device which (1) will energize the audible alarms if and when this power supply fails or its voltage exceeds the limits specified by the Commission for the particular type of alarm involved; or (2) will automatically connect the auto-alarm to an auxiliary power supply, the voltage of which is within the specified limits.

(g) The testing device (see § 8.206 relative to required testing of the auto-alarm) of the auto-alarm shall be adjusted to produce a test signal of the correct value. This adjustment shall be considered satisfactory when it becomes necessary to turn the sensitivity control from its position of lowest sensitivity (zero dial position) to its position of approximately one-third maximum sensitivity before the alarm can be actuated.

§ 8.512 *Auto-alarm instructions.* (a) There shall be furnished at least two sets of written instructions for the guidance of the ship station radio operator and ship's officers relative to the auto-alarm, which shall include:

(1) A general technical description of the auto-alarm, including a circuit diagram of the auto-alarm receiver and a wiring diagram of its complete installation on shipboard.

(2) A general explanation of its principles of operation.

(3) A list of faults which may be indicated by the sounding of the audible alarm.

(4) Explanation of how to correct faults, remove and replace defective parts and perform limited repairs at sea.

(5) Explanation of how to test the alarm and adjust the sensitivity control to the "optimum" setting, which shall be summarized upon a card and permanently attached to the front of the alarm in a conspicuous position.

(6) Explanation of the effect of various sensitivity control settings upon the operation of the alarm, which shall be summarized upon a card and permanently attached to the front of the alarm in a conspicuous position.

(7) Description of procedure to be followed with respect to operator making adjustments when alarm bell sounds and also in making log entries.

§ 8.513 *Interior communication system.* (a) Pursuant to paragraph (g) of section 355 of the Communications Act, an efficient interior communication system shall be provided between the bridge of a ship and the radio room, in all cases where the radio room does not adjoin or open onto the navigating bridge structure; further, an efficient interior communication system shall be provided between the bridge and the location of the direction finding apparatus whenever the latter is not located on the bridge or within any compartment adjoining or opening onto the navigating bridge structure. When the operating position of the emergency radio installation is not located in the radio room normally used for operating the main radio installation, an efficient interior communication system shall be separately provided between the bridge and each of these radio operating positions.

(b) If a vessel is provided with more than one location from which it is normally controlled and steered, the interior communication system between the radio room and bridge shall include in the system a point of communication to each such location. The existence at a location of all of the following factors will be considered to be evidence that a point of communication should there be established: (1) Provision of a steering wheel; (2) provision of a compass; (3) provision of an engine order telegraph; (4) provision of apparatus to control the whistle; and (5) enclosure of the location to form a wheelhouse.

(c) The requirement of paragraph (b) of this section shall not apply to locations established solely for emergency use in event of failure of the normal steering facilities or locations used solely while docking or maneuvering a ship while in port or occasionally for brief periods while navigating the ship in close quarters on inland waters.

§ 8.514 *Requirements for interior communication systems.* The interior communication systems required by § 8.513 shall be capable of providing efficient signalling and communication, shall be independent of any other communication system on the ship, and shall be a type of system approved by the United States Coast Guard. Further, the location and termination of individual systems shall be subject to approval by the Commission.

§ 8.515 *Radio station clock.* The radio station clock required by § 8.114, when installed on board a vessel subject to Title III, Part II of the Communications Act, shall, in addition to the requirements of § 8.114, have a sweep second hand and a dial not less than 5 inches in diameter. If a ship is provided with a separate emergency radio operating room, such a clock shall also be installed in the emergency operating room.

§ 8.516 *Direction-finder.* Each ship of 1600 gross tons or over which is subject to the requirement set forth in subparagraph (a) (2) of section 351 of the Communications Act or which is subject to Regulation 12 of Chapter V of the Safety Convention shall be equipped with an efficient direction-finder (radio compass) properly adjusted in operating condition and approved by the Commission.

§ 8.517 *Requirements for direction-finder.* (a) To be approved by the Commission, as provided by § 8.516, the radio direction-finder (radio compass) shall:

(1) Be capable of efficiently receiving signals (at least types A2 and B emission) with the minimum of receiver noise, on each radio-channel within the frequency band 285 to 515 kc which is designated by the International Radio Regulations for distress, direction-finding, or marine radio beacons;

(2) Be capable of receiving types A1, A2, and B emission, if installed on board ship after January 1, 1940;

(3) Be capable of taking bearings on received radio signals as set forth in subparagraphs (1) and (2), of this paragraph, from which the true bearing and direction may be determined;

(4) Be accurately calibrated for the purpose of taking bearings from which the true bearing and direction may be determined for actual use in maritime radiolocation service and maritime radionavigation service; and

(5) Have a sensitivity, in the absence of interference, sufficient to permit of accurate bearings being taken on a signal having a field strength as low as 50 microvolts per meter.

(b) The calibration of the direction-finder shall be verified whenever any changes are made in the physical or electrical characteristics or the location of any antenna(s) on board the vessel, or whenever any changes are made in any structure(s) on deck, which might appreciably affect the accuracy of the direction-finder. The calibration particulars shall be checked at yearly intervals or as near thereto as possible. A record of the calibration of any checks made of their accuracy shall be maintained on board the vessel for a period of not less than 1 year from the date of the related action.

(c) Under conditions inherent in the operation of commercial shipping whereby it is impracticable for the Commission's inspecting engineer to determine, prior to departure of a vessel from a harbor or port for a voyage in the open sea, whether or not the direction finder complies with the requirement of paragraph (a) (4) of this section, the direction finder may be approved with respect to meeting that particular requirement, contingent upon the availability of sufficient information at a subsequent inspection to justify the continuance of such approval, on condition that:

(1) Prior to departure of the vessel, the master certifies in writing to the Commission's inspecting engineer that calibration of the direction finder as required by paragraph (a) (4) of this section will be completed to the satisfaction of the master before such vessel is navigated thereafter on a voyage in the open sea; and

(2) During a subsequent official inspection of the direction finder, when such vessel has been navigated in the open sea outside a harbor or port after certification was given by the master as prescribed in subparagraph (1) of this paragraph, the master shall make available to the Commission's inspecting engineer the appropriate written records resulting from calibration of the direction finder pursuant to said certification. If the information contained in these written records is satisfactory to the Commission's inspecting engineer, approval of the direction finder, with respect to meeting the requirement of paragraph (a) (4) of this section, as given initially under the provisions of this paragraph, will be continued.

(3) In the absence of acceptable evidence of compliance with the requirement of paragraph (a) (4) of this section, at the time of the subsequent inspection mentioned in subparagraph (2) of this paragraph, or during any following inspection the Commission may withdraw approval of the direction finder until such time as the necessary evidence of compliance with this requirement is available.

§ 8.518 *Auxiliary receiving antenna.* On a vessel required by law to maintain a watch by a qualified operator or operators, an effective auxiliary receiving antenna or other approved arrangement shall be provided whenever necessary to avoid unauthorized interruption or reduced efficiency of this watch by reason of unavailability of the normal receiving antenna for use during the period of time when a radio direction-finder on board the same vessel is being operated.

§ 8.519 [Reserved]

§ 8.520 *Lifeboat radio equipment.* (a) Lifeboat radio equipment, portable or non-portable, required by law to be provided, shall comply with applicable requirements of paragraph (b) through (g) of this section.

(b) All lifeboat radio equipment shall include the following components as a minimum:

(1) An antenna for transmitting and receiving which can be quickly utilized by a person in the lifeboat while afloat together with such antenna accessories as are necessary;

(2) An artificial antenna for test purposes.

(3) A transmitter with keying arrangement(s) for the use of radiotelegraphy;

(4) A radio receiver with head receiver;

(5) A power supply of required capacity;

(6) The necessary material or device for a ground connection to the water when the lifeboat is afloat.

(c) Each of the components specified in paragraph (b) of this section shall be of a type of apparatus or shall comprise such items as are approved by the Commission as capable of meeting the provisions of §§ 8.556, 8.557, 8.558 or 8.559, as may be applicable.

(d) Provisions relative to capacity, use and maintenance of storage batteries used as the power supply for lifeboat non-portable radio equipment:

(1) A storage battery power supply of lifeboat radio equipment shall be capable at all times of operating the entire lifeboat radio installation for a period of at least six continuous hours as is stipulated for an emergency power supply in § 8.504 (b).

(2) Storage batteries may be used to operate equipment other than radio except the electric starter and ignition system of a lifeboat motor, provided such additional use will not adversely affect the required capabilities of the battery. All individual circuits connected to the battery shall be independently and properly fused.

(3) Storage batteries shall be kept adequately charged at all times while at sea. The charging of such batteries shall not require their removal from the lifeboats in which they are installed. The necessary charging equipment shall be arranged so as not to interfere with the launching of the lifeboats, and for this purpose shall be easily and quickly removable. The charging circuit for the lifeboat radio storage battery or batteries shall be routed through the main radiotelegraph operating room of the vessel. A device which, during charge of the lifeboat radio battery or batteries, will give a continuous indication of the polarity and the rate of charge, shall be connected in this charging circuit and shall be located in the main radiotelegraph operating room for purposes of frequent observation.

(4) In any installation made on or after November 19, 1952, provisions shall be made to enable charging of the storage battery by means of a generator on the motor lifeboat engine.

(5) Subject to approval of the United States Coast Guard storage batteries shall be mounted in suitable containers that will provide protection from salt water spray and also allow proper ventilation.

(e) Lifeboat non-portable radio equipment shall be capable of developing by day, over the sea and under normal conditions and circumstances, a r. m. s. radio field intensity of 50 microvolts per meter on the frequency 500 kilocycles at a distance of 25 nautical miles. Ability to meet this requirement may be evidenced in the absence of such other means as will provide a reliable indication that this requirement is met, by a product of the maximum height of antenna above the mean surface of the water expressed in meters and a r. m. s. antenna current on the frequency 500 kilocycles expressed in amperes of not less than 10.

(f) Conditions of fitting of lifeboat and radio equipment:

(1) Non-portable radio equipment shall be installed in a cabin large enough to accommodate both the equipment and the person using it and arrangements shall be such that the efficient operation of the lifeboat radio installation shall not be interfered with by the motor boat engine while it is running, whether or not a battery is on charge.

(2) The use of metal masts and stays, unless broken by insulators, or of any structure at electrical ground potential at the masthead(s) is not permitted in lifeboat portable or non-portable radio equipment: *Provided, however,* That this limitation shall not prohibit the use of a metal mast or masts used as the antenna.

(g) Inspections and tests of lifeboat radio equipment:

(1) Inspections and tests of lifeboat radio equipment shall be conducted by a qualified representative of the licensee at weekly intervals while the ship is at sea and within 24 hours prior to the ship's departure from each port but not necessarily more than once each week. Such inspections and tests are subject to such limitations as may be imposed by the Administration having jurisdiction at foreign ports. It is necessary that each transmitter for use in lifeboats be licensed by the Commission to insure compliance with the rules and regulations of the Commission, during the required tests with an actual antenna. Operation of a transmitter installed in or for use in a lifeboat is ordinarily authorized by the regular ship station license when it has been described in the application for such license and the authorization has been approved by the Commission. (See § 8.68.)

(i) Inspections and tests shall include operation of the transmitter connected to an artificial antenna and determination of the specific gravity in the case of a lead-acid battery, or voltage under normal load in the case of other type of batteries, of any battery provided as a part of the lifeboat radio equipment.

(2) When the vessel is in a harbor or port of the United States an authorized representative of the Commission may require:

(i) Inspection and test of lifeboat radio equipment in a lifeboat afloat to include an actual test of the transmitter and receiver connected to the required antenna to determine that the equipment is in effective operating condition.

(ii) The shipowner, operating company, or station licensee to prove by demonstration, as may be deemed necessary, that a storage battery used as a part of the lifeboat radio equipment is capable of energizing the installation for the required period of time as is prescribed for an emergency transmitter in § 8.504 (b).

(3) The results of inspections and tests shall be made known to the master of the vessel and shall be entered in the ship's radio station log or in the ship's log if the ship is not provided with a radio station. These entries shall be made available to duly authorized representatives of the Commission upon request.

§ 8.521 *Auxiliary equipment and components.* (a) On board all vessels subject to Title III, Part II of the Communications Act, sufficient tools to make any minor adjustments of the main and emergency radio installation shall be provided, together with spare parts and auxiliary equipment sufficient to maintain the installations in efficient working condition. These spare parts and this auxiliary equipment are designated in §§ 8.522 to 8.524, inclusive. Pursuant to the provisions of § 8.525, they shall be located so as to be readily accessible to the radio operator in an emergency.

(b) In addition to the spare parts required by § 8.522, and the auxiliary equipment required by § 8.523, spare parts as are specifically designated in special lists promulgated by the Commission pursuant to the provisions of section 358 (a) (2) of the Communications Act shall be provided for transmitters, receivers, auto-alarms, direction-finders, lifeboat radio installations, and other required equipment which have been given type approval by the Commission.

NOTE: Lists of spare parts required for specific types of equipment approved by the Commission are furnished to its inspectors in charge at principal ports and are available to others upon request.

§ 8.522 *General spare parts.* (a) The following spare parts are considered indispensable for the general maintenance of the appropriate shipboard radio installations in efficient working condition on board vessels subject to Title III, Part II of the Communications Act:

(1) Sufficient wire of good electrical conductivity and suitable insulators for the erection of a single-wire antenna of the same configuration and linear dimensions as the main transmitting antenna but not less than 300 feet of such wire and not less than two such insulators; or an assembled single-wire transmitting antenna (including suitable insulators) of the same linear dimensions as the main transmitting antenna.

(2) One sleeve bearing of each type used by all rotating machinery which is a component part of the radio installation required by law.

(3) One complete set of brushes for each unit of rotating machinery which utilizes brushes.

(4) Renewable fuse-cartridges of each type used in connection with units of the radio installation in the amount of at least one-half the number of each size and type in actual use. For each renewable fuse-cartridge in actual use, there shall be available six spare fuse links of appropriate capacity. For each non-renewable fuse in use, there shall be available six spare fuses of the same type and of appropriate capacity.

(5) One spare electric light bulb for each emergency light required by § 8.504 (a) (6).

§ 8.523 *General auxiliary equipment.* (a) The following auxiliary equipment is considered indispensable for the general maintenance of the appropriate shipboard radio installations in efficient working condition on board vessels subject to Title III, Part II of the Communications Act.

(1) One 1- to 2-inch screwdriver with approximately ⅛-inch blade.

(2) One 4- to 6-inch screwdriver.

(3) One set of assorted end wrenches or socket wrenches, or one adjustable end wrench.

(4) One pair 5- to 8-inch side-cutting pliers.

(5) One high-resistance direct-current voltmeter having a resistance of at least 1,000 ohms per volt and capable of measuring 2, 6, and 110 volts with an accuracy of at least 3 percent except that on ships where the normal radio room power supply voltage is higher than 110 to 120 volts direct current, the voltmeter shall be capable of measuring this line voltage and 2 and 6 volts with an accuracy of at least 3 percent.

(6) One electric flashlight, two-cell or larger, complete with bulb and battery, or one portable emergency electric lamp (protected from mechanical injury) with at least 10 feet of flexible cord and means for rapid connection to the emergency source of power. One spare bulb of the type used shall be provided.

(7) One hydrometer for use with lead-acid batteries when this type of battery is installed.

(8) Approximately one gallon or more of distilled water, or the same amount of any kind of water suitable for use in the type of storage batteries installed.

(9) Instruction book(s) and circuit diagrams, including modifications covering transmitter(s), receiver(s), and direction-finder, if a direction-finder is required.

(10) One electric soldering iron of at least 100 watts rated power, which is capable of operating from a source of power available in the room or cabin housing the required radio apparatus; and at least one-half pound of solder with appropriate non-corrosive soldering flux (for example, rosin-core solder).

§ 8.524 *Spare parts for specific apparatus.* (a) Prior to the Commission's approval of a particular type of marine transmitter, receiver or direction-finder, and prior to the issuance of associated specific lists of required spare parts and auxiliary equipment, the following spare parts and auxiliary equipment relative to specific apparatus shall be provided in addition to those stipulated in §§ 8.522 and 8.523.

(1) *For each electron tube transmitter (other than lifeboat transmitter).* One radio-frequency oscillator tube, one tube for each radio-frequency amplifier stage, and, if used to provide A2 emission, one audio-frequency oscillator tube. One tube for a main transmitter or two tubes for an emergency transmitter intended for use in the radio-frequency circuit of transmitters of the self-rectified, simple oscillator type. One anode power-supply rectifier tube for each such tube used. One resistor of each type used as a grid leak; one resistor of each type as used in voltage divider of grid-blocking keying circuit; one resistor of each type as used in series with keying relay winding. The value of each resistor shall be clearly indicated thereon.

(2) *Receivers (other than lifeboat receivers).* One complete spare set of

tubes for the receiver(s). One headset (telephone receiver) complete with connecting cord, and, if used, a cord-terminal plug.

(3) *Direction-finders.* One complete set of tubes for the radio receiver incorporated in the direction finder, when a direction-finder is required.

(4) *Lifeboat radio equipment.* One electron tube of each type used for normal operation of the radio installation, including neon or any other type of tube or lamp employed as resonance indicator(s), expect that if three or more electron tubes of a single type are employed, two electron tubes of that type shall be provided: Renewable fuse-cartridges of each type used in connection with the units of the lifeboat radio installation or which are used in circuits connected to the lifeboat radio installation power supply in the amount of at least one-half the number of each size and type in actual use. For each renewable fuse-cartridge in use, there shall be available six spare fuse links of appropriate capacity. For each non-renewable fuse in use, there shall be available six spare fuses of the same type and appropriate capacity. If wire is used, sufficient wire shall be provided to permit six complete fuse replacements. Additionally, non-portable lifeboat radio equipment shall be provided with at least 35 feet of insulated wire suitable for use as antenna wire; 2 antenna insulators; one panel electric light bulb, if used, one screwdriver and one pair of sidecutting pliers.

(5) *Auto-alarms.* One complete set of spare parts specifically designated and promulgated by the Commission for the particular type of auto-alarm which is type-approved in accordance with § 8.554.

§ 8.525 *Location of spare parts.* (a) Spare parts for the direction-finder receiver shall be kept in the same compartment or room in which this receiver is located.

(b) Spare parts and auxiliary equipment for the non-portable radio equipment shall be kept in the lifeboat cabin housing the radio equipment. Spare parts and auxiliary equipment for the lifeboat portable radio apparatus shall be so kept as to be convenient for the routine maintenance of the equipment.

(c) The spare emergency light bulb(s) shall be mounted in close proximity to the corresponding emergency light socket(s).

(d) The antenna wire, antenna insulators, and distilled water, respectively, may be retained in the radio operating room or elsewhere: *Provided,* The antenna material is readily accessible to the radio operator in an emergency.

(e) All other spare parts and auxiliary equipment shall be securely retained preferably in a single space, readily accessible to the radio operator in an emergency, in the main radiotelegraph operating room, or, if desired, in any associated room adjacent to and connected with the main radiotelegraph operating room by an interconnecting doorway.

(f) The space(s) allocated for the location of spare parts and auxiliary equipment in accordance with paragraph (e) of this section shall be used *only* for this purpose, and such space(s) shall be appropriately and conspicuously marked.

(g) All required spare parts and auxiliary equipment shall be available for observation by authorized representatives of the Commission at the time of inspection of the ship radio installation.

RADIOTELEPHONE INSTALLATIONS ON SHIPS SUBJECT TO PART II OF TITLE III OF THE COMMUNICATIONS ACT OR ON U. S. SHIPS SUBJECT TO THE SAFETY CONVENTION

§ 8.528 *Radiotelephone installations.* (a) A radiotelephone installation required to be provided on any ship by reason of the provisions of Part II of Title III of the Communications Act or on a United States ship by reason of the Safety Convention, shall comply in an efficient manner with §§ 8.529, 8.530, 8.531, 8.532 and 8.533 in addition to all other applicable requirements of this part. The radiotelephone installation so provided shall include at least the following:

(1) A radiotelephone transmitter and associated radiotelephone receiving equipment;

(2) A main source of power;

(3) An emergency source of power when required by § 8.531;

(4) An antenna and ground system; and

(5) Such other apparatus as may be necessary for the proper operation and use of these components of this installation.

§ 8.529 *Radiotelephone transmitter.* (a) The radiotelephone transmitter shall be capable of transmitting on the radiotelephone calling and distress frequency, 2182 kc, the ship-to-ship working frequency, 2638 kc, and at least two other frequencies within the band 1605 to 2850 kc used for ship-to-shore or ship-to-ship communications.

(b) The transmitter shall be capable of proper technical operation with peak modulation percentage between 75 and 100 percent and shall be so adjusted that the transmission of speech normally produces peak modulation within these limits.

(c) The radiotelephone transmitting installation shall be capable of transmitting clearly perceptible signals from ship to ship during daytime, under normal conditions and circumstances, over a minimum normal range of one hundred and fifty nautical miles. The transmitting apparatus of the radiotelephone transmitting installation shall be considered to comply with this range requirement whenever such apparatus is properly adjusted for use with an actual ship station transmitting antenna meeting the requirements of § 8.532 and has been demonstrated or is of a type which has been demonstrated to the satisfaction of the Commission as capable, with normal operating voltage applied, of delivering not less than 25 watts of unmodulated radio frequency carrier power on each of the frequencies 2182 kc and 2638 kc into an artificial antenna consisting of a series network of 10 ohms effective resistance and 200 micromicrofarads capacitance: *Provided,* That if a type demonstration has been made, an individual demonstration of the power capability of the transmitting apparatus of any individual radiotelephone installation as normally installed on board ship may be required to determine whether it complies with these power requirements.

(d) Transmitters installed after June 1, 1956 and all transmitters after June 1, 1960 regardless of installation date shall be equipped with a device which will provide continuous visual indication that the transmitter is supplying radiofrequency power to the antenna.

(e) The transmitter shall be adequately protected, by suitable devices such as fuses or circuit breakers, from excessive currents and voltages which could cause damage to components thereof.

(f) A durable nameplate shall be mounted on the transmitter or made an integral part thereof showing clearly at least the following:

(1) The name of the manufacturer;

(2) The type or model number.

§ 8.530 *Radiotelephone receiving equipment.* (a) The radiotelephone installation shall include the following receivers.

(1) A receiver capable of reception of A3 emission on 2182 kc, 2638 kc and the receiving frequencies associated with transmitting frequencies required to be provided by § 8.529. The receiver shall be capable of accurate and convenient selection of these frequencies without manual tuning, i. e., it shall be pre-set for reception on each of the required frequencies.

(2) After June 1, 1956, in addition to the receiver required by subparagraph (1) of this paragraph, a receiver capable of manually tuned reception over the entire frequency band 1600 to 3500 kc shall be provided.

(b) One or more loudspeakers capable of effective operation shall be provided so as to permit reception at the principal operating location and at any other location where listening required by § 8.202 (c) and § 8.203 (d) is performed.

(c) Any receiving equipment provided as part of the required radiotelephone installation shall be capable of a sensitivity over the required frequency band on any required reception frequency of at least 50 microvolts. Sensitivity of the receiver is expressed as the radio frequency signal in microvolts modulated 30 percent at 400 cycles per second which must be delivered to the antenna terminals of the receiving apparatus through a suitable artificial antenna in order to produce an audio output of 50 milliwatts of power to the loudspeaker with a signal-to-noise ratio of at least 6 decibels. Evidence of a manufacturer's rating or a demonstration of the sensitivity of a required receiver computed upon this basis shall be furnished upon request of a Commission engineer.

(d) Any receiving equipment provided as part of the required radiotelephone installation shall be provided with a durable nameplate mounted on the receiver or made an integral part thereof showing at least the following:

(1) The name of the manufacturer.

(2) The type or model number.

(e) Required receiving equipment shall be protected by means of suitable devices such as fuses or circuit-breakers from excessive voltages which could cause damage to any component thereof.

§ 8.531 *Power supply.* (a) There shall be readily available for use at all times under normal load conditions, while the vessel is at sea, and when required during inspection of the ship radiotelephone station by an authorized representative of the Commission, a main source of energy, capable of supplying electrical power sufficient to energize simultaneously and efficiently the radiotelephone transmitter at its required power and the required receiver. At all times herein specified the potential of the main source of energy at the power input connections of the radiotelephone installation shall not deviate from its rated electrical potential by more than 10 percent on vessels completed on or after July 1, 1941, nor more than 15 percent on vessels completed before that date. In the case of new installations, an emergency source of energy independent of the vessel's normal electrical system shall be provided, and shall be located in the upper part of the ship, unless the main source of energy is so located, in which case the emergency source of energy is not required. The emergency source of energy when required shall be located as near the radiotelephone transmitter and receiver as is practicable. A power supply shall be deemed to be located in the upper part of the ship when it is located on the same deck as the wheel house or at least one deck above the vessel's main deck.

NOTE: See § 8.113 regarding application of Coast Guard regulations regarding power supply.

(b) Each emergency source of energy and each main source of energy which is provided in order to comply with the power supply requirements of this section and which consists of or includes batteries shall, with respect to such batteries, have sufficient reserve capacity available at all times while the ship is at sea and during official inspections to permit operation of the radiotelephone installation for at least 6 hours continuously under normal working conditions. If directed by the Commission or its authorized representative, the ship owner, operating company, or station licensee shall prove this capacity by means of a discharge test over the 6-hour period of time when supplying power at the voltage required for normal and effective operation, to an electrical load as prescribed by paragraph (d) of this section, or by such other means as may be deemed necessary.

(c) Each emergency source of energy which is provided in order to comply with the power supply requirements of this section and which consists of or includes an engine-driven generator shall, with respect to such engine-driven generator, have sufficient reserve fuel available at all times while the ship is at sea and during official inspections to permit operation of the radiotelephone installation for at least 6 hours continuously under normal working conditions. If directed by the Commission or its authorized representative, the ship owner, operating company, or station licensee shall prove the adequacy of the fuel supply by demonstration, or by such other means as may be deemed necessary. Proof of the adequacy of the engine fuel supply to operate the unit continuously and effectively over the 6-hour period of time may be established by using as a basis the fuel consumption during a continuous period of 1 hour when supplying power at the voltage required for normal and effective operation, to an electrical load as prescribed by paragraph (d) of this section.

(d) The electrical load to be supplied by a main or an emergency source of energy under the provisions of paragraph (b) or (c) of this section shall be computed as the sum of all loads to which it may supply energy in times of emergency or distress. The radiotelephone transmitting apparatus shall be regarded as having an intermittent power demand amounting in the aggregate to one-half the six-hour period.

(e) At the conclusion of the test specified in paragraphs (b) and (c) of this section, no part of the main or emergency sources of energy shall have an excessive temperature rise, nor shall the specific gravity or voltage of any storage battery be below the 90 percent discharge point as determined from information (such as voltage curves or specific gravity tables) supplied by the manufacturer of the type of battery involved.

(f) Means shall be provided for adequately charging any storage batteries used as a main or emergency source of energy or any part thereof, for the required radiotelephone installation. There shall be provided a device which, during charging of the batteries, will give a continuous indication of the rate and polarity of such charging.

(g) The cooling system of each internal combustion engine used as a part of any required emergency source of energy for the radiotelephone installation shall be adequately protected or treated to prevent freezing or overheating consistent with the season and route to be traveled by the particular vessel involved.

(h) All required power-supply circuits shall be appropriately protected by means of suitable devices such as fuses or circuit-breakers from overloads or short-circuits, which could damage any component thereof.

§ 8.532 *Radiating system.* (a) In each radiotelephone installation an antenna shall be provided which is as nondirectional and as efficient as is practicable for the transmission and reception of radio ground waves over seawater. The installation and construction of this antenna shall be such as to insure, insofar as is practicable, proper operation in time of an emergency.

(b) When an electrical ground connection is used as a necessary element of the radiating system, such connection shall be made in an efficient manner to the hull of a vessel having a metal hull or, in the case of a vessel not having a metal hull, to a bare plate and/or strips of corrosion resistant metal of good electrical conductivity having a total area of at least 12 square feet in the aggregate, permanently attached to the hull below the waterline and insofar as possible located directly under the antenna structure and radio apparatus.

§ 8.533 *General requirements applicable to radiotelephone installations.* (a) Each radiotelephone installation in respect to all components thereof required by reason of Title III, Part II of the Communications Act or the Safety Convention shall meet the following requirements:

(1) The radiotelephone transmitter, receiver and all controls necessary for their proper use and operation shall be located in the upper part of the ship. For this purpose, the upper part of the ship shall be considered to include locations at wheel house level or those which are at least one deck above the vessel's main deck. If the principal operating location is not in the room from which the vessel is normally steered while at sea or not in a room adjacent to and opening directly into such room, an interior two-way voice communication system including an attention signaling system shall be provided between such room and the principal operating location. In the case of installations made after June 1, 1956, the principal operating location shall be in the room from which the vessel is normally steered while at sea.

(2) If the radiotelephone installation is operated from any other position than the principal operating location, it shall always be possible to take control of the operation of the radiotelephone installation at the principal operating location as follows:

(i) Except as provided in subdivision (ii) of this subparagraph, a method shall be provided for taking control at the principal operating location as herein prescribed which is direct, positive and independent of action by any person not at the principal operating location.

(ii) The use of an interior shipboard communication system between the principal operating location and all other locations at which there is a radiotelephone operating position shall be acceptable as a method for taking control at the principal operating location as herein prescribed on condition that the communication thereby provided is reliable, effective, immediately available at all times, and is usable independently of any other interior communication circuit: *Provided, however,* That in the case of radiotelephone installations first placed in service on or after June 1, 1956 the use of such a method for taking control at the principal operating location shall be acceptable only in the case of those radiotelephone operating positions located in the chart room or master's quarters.

(3) The radiotelephone installation when utilizing the fixed tuned receiver required by § 8.530 (a) (1) shall be so designed that when a qualified operator is present at the principal radiotelephone operating location:

(i) Switching between the calling and distress frequency 2182 kc and any required working frequency or vice versa may be performed within a period of five seconds;

(ii) Changeover from transmission to reception and vice versa may be accomplished within a total period of two seconds on each of the required frequencies under circumstances which do not require a change in operating radio channel at the same time.

(iii) Use of the emergency source of energy, when required by § 8.531, shall be available within 1 minute after any need arises for its use.

(4) The components and assembly of the radiotelephone installation shall be such as to insure safe and effective operation of the equipment and shall be arranged to facilitate proper repair and replacement of parts. Adequate protection shall be provided against the action of saline moisture and the effects of vibration, humidity and temperature encountered on shipboard.

(5) A reliable electric light shall be provided and permanently arranged so as to illuminate satisfactorily the operating controls at the principal operating location. When the principal operating location is in the room from which the vessel is steered, the light shall be so arranged that its illumination is confined substantially to the vicinity of the operating controls so that it may be used at night without interfering with navigation of the vessel. The light shall be energized from the main source of energy, and, if an emergency source of energy for the radiotelephone installation is required, means shall be provided for energizing the light from such source of energy also.

§ 8.534 *Test of radiotelephone installation.* Unless the normal use of a radiotelephone installation required by Title III, Part II of the Communications Act or the Safety Convention demonstrates that the equipment is in proper operating condition for an emergency, a test communication for this purpose shall be made by a qualified operator each day the vessel is navigated. When this test is performed by some person other than the master and the equipment is found not to be in proper operating condition for an emergency, the master shall be notified promptly thereof.

RADIO INSTALLATIONS ON SHIPS SUBJECT TO THE GREAT LAKES AGREEMENT

§ 8.535 *Periodical survey of radiotelephone installation.* Except as provided in § 8.537, each vessel of the United States required by the Great Lakes Agreement to carry a radiotelephone installation, shall have a periodical survey of the radiotelephone installation not less than once every twelve months for the purpose of obtaining an appropriate certificate as prescribed by Article 12 of said agreement and § 8.536 of this subpart. The survey shall be made while the vessel is in active service or within not more than one month before the date on which it is placed in service.

§ 8.536 *Certificates.* Except as provided in § 8.537, each vessel of the United States to which the Great Lakes Agreement applies shall, not later than November 13, 1955, have on board and posted at the principal operating location of the radiotelephone installation required by said Agreement an appropriate valid certificate as prescribed by Article 12 of said Agreement.

§ 8.537 *Occasional navigation on the Great Lakes.* Any vessel of the United States which enters the Great Lakes from Montreal or below and which engages in not more than two voyages on the Great Lakes in any one calendar year solely between (a) one or more ports outside the Great Lakes and (b) one or more ports on the Great Lakes, may in lieu of complying with the requirements of § 8.540, comply with the radiotelephone installation requirements of Regulation 15, Chapter IV of the Safety of Life at Sea Convention, 1948: *Provided,* That—

(a) The vessel has on board a valid Safety Radiotelephony certificate; and

(b) The radiotelephone installation is equipped to transmit and receive on the frequencies 2182 kc and 2003 kc.

§ 8.538 *Failure of radiotelephone installations while en route.* If, while a United States vessel is subject to the Great Lakes Agreement, the vessel's radiotelephone installation required by Article 8 of said Agreement ceases to be in effective operating condition, the master shall forthwith exercise due diligence to restore the radiotelephone installation to effective operating condition at the earliest practicable moment, and, in any event, the effective operating condition of the radiotelephone installation shall be restored at the destination on the Great Lakes of the vessel. In addition to the foregoing, the master shall within 12 hours after the time of arrival of the vessel at the destination, mail to the Secretary, Federal Communications Commission, Washington 25, D. C., an explanation of the full particulars of the matter in writing including the date the master became aware of the deficiency in the radiotelephone installation and the nature of such deficiency, a description of steps taken to correct such deficiency, and in the case of a vessel whose destination is on the Great Lakes, a statement that the radiotelephone installation has been, or will be, placed in effective operating condition before the ship leaves that port.

§ 8.539 [Reserved]

§ 8.540 *Requirements for radiotelephone installation.* (a) Each vessel of the United States while subject to the requirements of the Great Lakes Agreement shall, in accordance with that Agreement, be fitted with a radiotelephone installation (see § 8.8 (n)) in effective operating condition which is capable of meeting the requirements set forth in this section together with the provisions of such other rules in this part, governing ship stations using telephony, as are applicable.

(1) The radiotelephone installation, exclusive of the main source of power for energizing such installation, shall be located as high as practicable in the upper part (see § 8.113) of the vessel and shall be adequately protected to ensure proper operation and so as not to endanger the vessel and the radio apparatus comprising such installation.

(2) A main source of energy of sufficient capacity to energize the radiotelephone installation properly and immediately shall be available at all times when the vessel is subject to the requirements of the Great Lakes Agreement.

(3) The auxiliary source of energy, required by the Great Lakes Agreement to be provided on passenger carrying vessels (see § 8.2 (o)) of 1,000 gross tons or more, shall be independent of the vessel's normal electrical system and shall be capable of properly energizing the radiotelephone installation and the light provided pursuant to subparagraph (11) of this paragraph, in addition to any other loads to which it may supply energy in times of emergency or distress, for at least four continuous hours under normal operating conditions. When meeting the four-hour requirement, such auxiliary source of energy shall be located in a position of the greatest possible safety and as high as practicable in the upper part of the vessel.

(4) The shipowner, operating company, or station licensee, if directed by the Commission or its authorized representative, shall prove by demonstration prescribed in subdivisions (i), (ii), (iii), and (iv) of this subparagraph or by such other means as may be deemed necessary that the auxiliary source of energy, when required to be provided, is capable of energizing the radiotelephone installation under the conditions and for the minimum period of time required by law.

(i) When the auxiliary source of energy consists of or includes a storage battery, proof of the ability of such battery power supply to operate continuously and effectively over a prescribed period of time is authorized to be established by a discharge test over such prescribed period of time, when supplying power at the voltage required for normal and effective operation, to an electrical load as prescribed by subdivision (iii) of this subparagraph.

(ii) When the auxiliary source of energy consists of or includes an engine-driven generator, proof of the adequacy of the engine fuel supply to operate the unit continuously and effectively over a prescribed period of time may be established by using as a basis the fuel consumption during a continuous period of 1 hour when supplying power, at the voltage required for normal and effective operation, to an electrical load as prescribed by subdivision (iii) of this subparagraph.

(iii) The electrical load to be supplied by an auxiliary source of energy for the purpose of establishing proof of required capacity shall be computed as the sum of all loads to which it may supply energy in times of emergency or distress. The radiotelephone transmitting apparatus shall be regarded as having an intermittent power demand amounting in the aggregate to one-half of the four-hour period.

(iv) At the conclusion of the tests specified in subdivisions (i) and (ii) of this subparagraph, no part of the auxiliary source of power shall have an excessive temperature rise, nor shall the specific gravity or voltage of the storage battery be below 90 per cent discharge point as determined from the information (such as voltage curves or specific gravity tables) supplied by the manufacturer for the type of battery involved.

(5) Means shall be provided for adequately charging any storage batteries used as a source of energy for the radio-

telephone installation. There shall be provided a device which, during the charge of the batteries, will give a continuous indication of the rate and polarity of such charge.

(6) The principal operating location of the radiotelephone installation shall be on the bridge. If the radio apparatus of this installation (as distinguished from the normal operating controls) is located other than on the bridge, the radiotelephone installation shall be capable of being operated from that location as well as from the bridge. In any event, it shall always be possible to take control of the operation of the radiotelephone installation at the principal operating location on the bridge, as follows:

(i) Except as provided in subdivision (ii) of this subparagraph, a method shall be provided for taking control on the bridge as herein prescribed which is direct, positive and independent of action by any person not on the bridge.

(ii) The use of an interior shipboard communication system between the bridge and all other locations at which there is a radiotelephone operating position shall be acceptable as a method for taking control on the bridge as herein prescribed on condition that the communication thereby provided is reliable, effective, immediately available at all times, and is usable independently of any other interior communication circuit: *Provided, however,* That in the case of radiotelephone installations first placed in service on or after April 1, 1955, the use of such a method for taking control on the bridge shall be acceptable only in the case of those radiotelephone operating positions located in the chartroom and in the master's quarters.

NOTE: The expression principal operating location is equivalent to the expression "location of the main operating position" contained in the Great Lakes Agreement.

(7) The radiotelephone installation shall be capable of being used for the effective transmission and reception of class A3 emission on the intership working frequency 2003 kc and on the calling and distress frequency 2182 kc.

(8) The transmitting apparatus of the radiotelephone installation shall be construed to comply with the power requirement of regulation 1, paragraph 5 of the Great Lakes Agreement whenever such apparatus is properly adjusted for use with the actual ship station transmitting antenna and is of a type which has been demonstrated to the satisfaction of the Commission as capable, with normal operating voltages applied, of delivering not less than 50 watts of unmodulated radio frequency carrier power on each of the frequencies 2182 kc and 2003 kc into an artificial antenna consisting of a series network of 10 ohms effective resistance and 200 micromicrofarads capacitance: *Provided,* That if deemed necessary by the Commission, a demonstration of the power capability of the transmitting apparatus of any individual radiotelephone installation as normally installed on board ship may be required to determine whether it complies with the power requirement of Regulation 1, paragraph 5 of the Great Lakes Agreement.

(9) The radiotelephone installation shall be so designed that when a certified person, as prescribed in § 8.158, is present at the principal operating location:

(i) Switching between the intership working frequency 2003 kc and the distress frequency 2182 kc and vice versa may be performed within a period of five seconds;

(ii) Changeover from transmission to reception and vice versa may be accomplished within a total period of two seconds on each of the frequencies 2003 kc and 2182 kc; and

(iii) Use of the auxiliary source of power, as required on passenger vessels of 1,000 gross tons or more, shall be available within 1 minute after any need arises for its use.

(10) The radiotelephone installation shall be adjusted so that the transmission of speech normally produces peak modulation percentages of at least 70 percent.

(11) Light from an electric source of energy shall be available and permanently arranged to so illuminate the operating controls of the radiotelephone installation at the principal operating location that the installation may be used at any time for quickly establishing and effectively carrying on radiotelephone communication in time of emergency or distress. If an auxiliary source of energy is required to be provided on board the vessel, arrangements shall be provided to utilize or to permit the use of such source of energy for such illumination within 1 minute after the need arises for its use.

(12) The radiotelephone installation shall be capable of properly energizing a loudspeaker on each of the frequencies 2003 kc and 2182 kc when the radio field intensity of the received carrier wave (measured when no modulation is present) is as low as 10 microvolts per meter. The radiotelephone installation may be considered capable of meeting this requirement if on each of the frequencies concerned the numerical value of the sensitivity of the receiver expressed in microvolts is equal to or less than the numerical value of the maximum height of the associated receiving antenna expressed in feet as measured from the cabin lead-in insulator. The numerical value of the sensitivity of the receiver may be based on manufacturer's specifications.

NOTE: Sensitivity of the receiver is expressed as the radio frequency signal in microvolts modulated 30 percent at 400 cycles per second which must be delivered to the antenna terminals of the receiving apparatus through a suitable artificial antenna in order to produce an audio output of 50 milliwatts of power to the loud speaker with a signal-to-noise ratio of at least 6 decibels.

(13) The radiating system of the radiotelephone installation provided for use on each of the frequencies 2182 kc and 2003 kc shall comply with the following requirements:

(i) The antenna shall be adequately protected to ensure proper operation and so as not to endanger the vessel and the radio apparatus comprising the installation.

(ii) The conductor or system of conductors comprising the antenna shall, consistent with the prevailing physical limitations affecting the antenna installation, be of such a configuration and so located physically with regard to proximity to metallic objects and structures as to allow for the development of as uniform a vertically polarized ground wave in all directions as possible for a given antenna power.

(iii) Wherever practicable the radiating system shall as a minimum be capable of converting at least 11.5 watts (unmodulated carrier power) of the power supplied to the system by the transmitting apparatus, on 2182 kc and 2003 kc respectively, into radiated power. A radiating system shall be deemed capable of meeting this requirement and also the requirements of subdivision (ii) of this subparagraph if it is demonstrated to the satisfaction of the Commission that the radio-telephone installation is capable of developing an effective inverse distance radio field intensity of 19.9 millivolts per meter at one statute mile on each of the frequencies 2003 kc and 2182 kc, or if the product of the antenna current on 2182 kc in root mean square amperes measured at the base of the antenna and the maximum height of the antenna expressed in feet as measured from the cabin lead-out insulator is at least 41.4 for an antenna having a horizontal top-length of not less than one-half of its maximum height; or 70.5 in the case of any other antenna.

(iv) When an electrical ground connection is used as a necessary element of the radiating system such connection shall be made in an effective manner to the hull of a vessel having a metal hull or, in the case of a vessel not having a metal hull, to a bare plate and/or strips of a corrosion resistant metal of good electrical conductivity having a total area of at least 12 square feet in the aggregate, permanently attached to the hull below the waterline and insofar as possible located directly under the antenna structure and radio apparatus.

§ 8.541 *Trial of radiotelephone installation.* At least once during each calendar day in which a vessel of the United States is navigated while subject to the Great Lakes Agreement, a test communication to demonstrate that the radiotelephone installation is in proper operating condition for an emergency shall be made by a certified person who is required in accordance with § 8.158, unless the normal daily use of the equipment demonstrates that this installation is in proper operating condition for that purpose. Should the equipment be found at any time by some person other than the master not to be in proper operating condition for an emergency, the master shall be promptly notified thereof. A record shall be made in the radio station log provided for by § 8.368 (c) showing the operating condition of the equipment as determined by either the daily normal communication or the daily test communication referred to above, and showing that, if an improper operating condition was found, the master was properly notified thereof.

RADIOTELEPHONE INSTALLATIONS ON SHIPS SUBJECT TO PART III OF TITLE III OF THE COMMUNICATIONS ACT

§ 8.543 *Radiotelephone installations.* A radiotelephone installation required to be provided on a vessel of the United States by reason of the provisions of Part III of Title III of the Communications Act, shall comply in an efficient manner with §§ 8.544, 8.545, 8.546, 8.547 and 8.548 in addition to all other applicable requirements of this part.

§ 8.544 *Certificates.* Each vessel of the United States to which Part III of Title III of the Communications Act is applicable shall, not later than March 1, 1958, have on board and posted in a prominent and accessible place in the vessel a valid Communications Act Safety Radiotelephony certificate as prescribed by § 8.501 (b) of this part.

§ 8.545 *General technical requirements.* (a) The components and assembly of each radiotelephone installation required by Title III, Part III of the Communications Act, shall be such as to insure safe and effective operation of the equipment and shall be arranged to facilitate proper repair and replacement of parts. Adequate protection shall be provided against the action of saline moisture and the effects of vibration, humidity, and temperatures encountered on shipboard. In particular, the components named hereunder shall meet specific requirements as follows:

(1) *Medium frequency transmitter and receiver.* Except under special circumstances as set forth in subparagraph (2) of this paragraph, the radiotelephone installation shall meet the following requirements:

(i) It shall be capable of being used for the effective transmission and reception of class A3 emission on the international calling and distress frequency 2182 kc, the ship-to-ship working frequency 2638 kc, and at least one ship-shore working frequency within the band 1600–3500 kc enabling communication with a public coast station serving the region in which the ship is operated, during the entire time the vessel is navigated in waters specified by section 381 of Title III, Part III of the Communications Act.

(ii) The transmitter shall be capable of proper technical operation with peak modulation percentage between 75 and 100 percent and shall be so adjusted that the transmission of speech normally produces peak modulation within these limits.

(iii) The radiotelephone transmitter shall have a power output of not less than 10 watts if installed in the vessel prior to March 1, 1957, and a power output of not less than 25 watts if installed on or after that date. After June 1, 1963, the radiotelephone transmitter shall have a power output of not less than 25 watts regardless of installation date. The required power specified herein is measured when no modulation is present. The transmitting apparatus shall be considered to be capable of meeting this power requirement when it is properly adjusted for use with a ship station transmitting antenna meeting requirements of this section and has been demonstrated or is of a type which has been demonstrated to the satisfaction of the Commission as capable, with normal operating voltages applied, of delivering not less than the required power on each of the frequencies 2182 kc and 2638 kc into an artificial antenna consisting of a series network of 10 ohms effective resistance and 200 micromicrofarads capacitance: *Provided,* That if a type demonstration has been made, an individual demonstration of the power capability of the transmitting apparatus of any individual radiotelephone installation as normally installed on board ship may be required to determine whether it complies with these power requirements.

(2) *Very high frequency transmitting and receiving equipment.* If a vessel is within communication range of a public coast station operating in part or entirely on frequencies within the band 152–162 Mc which is in service and maintains an efficient watch for the reception of class F3 emission on the frequency 156.8 Mc at all times while the vessel is navigated in waters specified by section 381 of Part III of Title III, and the vessel while so navigated is never more than 20 nautical miles from a 156.8 Mc receiving location of such station, such vessel may alternatively employ very high frequency transmitting and receiving equipment in lieu of the medium frequency equipment specified in subparagraph (1) of this paragraph. Such alternative equipment shall meet the following requirements:

(i) The equipment shall be capable of being used for the effective transmission and reception of class F3 emission on the frequencies 156.3 Mc, 156.8 Mc, and on the working frequency 157.3, 157.35 or 157.4 Mc as necessary for communication with one or more public coast stations serving the area in which the vessel is navigated.

(ii) The transmitter shall be capable of proper technical operation with peak modulation percentage between 75 and 100 percent and shall be so adjusted that the transmission of speech normally produces peak modulation within these limits. The frequency deviation with 100 percent modulation applied shall not exceed 15 kc.

(iii) The radiotelephone transmitter shall have a power output of at least 20 watts. The transmitter shall be considered to be capable of meeting this power requirement when it is properly adjusted for use with a ship station transmitting antenna meeting the requirements of these rules and has been demonstrated or is of a type that has been demonstrated to the satisfaction of the Commission as capable, with normal operating voltages applied, of delivering not less than 20 watts unmodulated radio frequency carrier power into 50 ohms effective resistance on each of the frequencies 156.8 Mc, 156.3 Mc and any of the frequencies 157.3, 157.35 or 157.4 Mc: *Provided,* That if a type demonstration has been made, an individual demonstration of the power capability of the transmitting apparatus of any individual radiotelephone installation as normally installed on board ship may be required to determine whether it complies with these power requirements.

(3) *Power supply.* (i) There shall be readily available for use at all times under normal load conditions while the vessel is navigated in waters specified by section 381 of Part III of Title III and when required during inspection of the ship radiotelephone station by an authorized representative of the Commission, a main source of energy capable of supplying electrical power sufficient to energize simultaneously and efficiently the radiotelephone transmitter at its required power, and the required receiver. At all times specified in the preceding sentence the potential of the main source of energy at the power input connections of the radiotelephone installation shall not deviate from its rated electrical potential by more than 10 percent on vessels the construction of which is completed on or after March 1, 1958, nor more than 15 percent on vessels completed before that date: *Provided,* That radiotelephone output power in the medium frequency band under either of these conditions shall not be less than 10 watts when such output power is applicable to a transmitter installed before March 1, 1957. In the case of a vessel of more than 100 gross tons, the keel of which was laid after March 1, 1957, an emergency source of energy independent of the vessel's normal electrical system shall be provided and shall be located in the upper part of the ship, unless the main source of energy is so located, in which case an emergency source of energy is not required. The emergency source of energy, when required, shall be located as near to the radiotelephone transmitter and receiver as is practicable. A source of energy shall be deemed to be located in the upper part of the ship when it is located on the same deck as the wheel house or at least one deck above the vessel's main deck. When batteries are used as either a main or emergency source of energy for the radiotelephone installation they shall be placed in such a position that they will not be contaminated by bilge water of the vessel, and in no case shall they be installed below the center line of the crankshaft of any inboard propulsion engine.

(ii) Each emergency source of energy and each main source of energy which is provided in order to comply with the power supply requirements of this section and which consists of or includes batteries shall, with respect to such batteries, have sufficient reserve capacity available at all times while the ship is navigated in waters specified by section 381 of Part III of Title III and during Commission inspections to permit operation of the radiotelephone installation for at least 3 hours continuously under normal working conditions. If directed by the Commission or its authorized representative, the ship owner, operating company, or station licensee shall prove this capacity by means of a discharge test over the 3-hour period of time when supplying power at the voltage required for normal and effective operation, to an electrical load as prescribed by subdivision (iv) of this subparagraph, or by such other means as may be deemed necessary.

(iii) Each emergency source of energy which is provided in order to comply with the power supply requirements of this section and which consists of or includes an engine-driven generator shall, with respect to such engine-driven generator, have sufficient reserve fuel available at all times while the ship is navigated in waters specified by section 381 of Part III of Title III and during Commission inspections to permit operation of the radiotelephone installation for at least 3 hours continuously under normal working conditions. If directed by the Commission or its authorized representative, the ship owner, operating company, or station licensee shall prove the adequacy of the fuel supply by demonstration or by such other means as may be deemed necessary. Proof of the adequacy of the engine fuel supply to operate the unit continuously and effectively over the 3-hour period of time may be established by using as a basis the fuel consumption during a continuous period of 1 hour when supplying power at the voltage required for normal and effective operation, to an electrical load as prescribed by subdivision (iv) of this subparagraph.

(iv) The electrical load to be supplied by a main or an emergency source of energy under the provisions of subdivision (ii) or (iii) of this subparagraph shall be computed as the sum of all loads to which it may supply energy in times of emergency or distress. The radiotelephone transmitting apparatus shall be regarded as having an intermittent power demand amounting in the aggregate to 1½ hours.

(v) At the conclusion of the test specified in subdivisions (ii) and (iii) of this subparagraph, no part of the main or emergency sources of energy shall have an excessive temperature rise, nor shall the specific gravity or voltage of any storage battery be below the 90 percent discharge point as determined from information (such as voltage curves or specific gravity tables) supplied by the manufacture of the type of battery involved.

(vi) Means shall be provided on board the vessel for adequately charging any storage batteries used as a main or emergency source of energy or any part thereof, for the required radiotelephone installation. There shall be provided a device which, during charging of the batteries, will give a continuous indication of the rate and polarity of such charging.

(vii) The cooling system of each internal combustion engine used as a part of any required emergency source of energy for the radiotelephone installation shall be adequately protected or treated to prevent freezing or overheating consistent with the season and route to be traveled by the particular vessel involved.

(viii) All required power-supply circuits shall be appropriately protected by means of suitable devices such as fuses or circuit-breakers from overloads or short circuits which could damage any component thereof.

(ix) Use of the emergency source of energy, when such emergency source is required by subdivision (i) of this subparagraph, shall be available within one minute after any need arises for its use.

(4) *Radiating system.* In each radiotelephone installation an antenna shall be provided in accordance with the applicable requirements of § 8.107 which is as nondirectional and as efficient as is practicable for the transmission and reception of radio ground waves over seawater. The installation and construction of this antenna shall be such as to insure, insofar as is practicable, proper operation in time of an emergency.

(5) *Electric light.* Unless the vessel is navigated during daylight hours only, a reliable electric light shall be provided and permanently arranged so as to illuminate satisfactorily the operating controls at the principal operating location. When the principal operating location is in the room from which the vessel is steered, the light shall be so arranged that its illumination is confined substantially to the vicinity of the operating controls so that it may be used at night without interfering with navigation of the vessel. The light shall be energized from the main source of energy, and, if an emergency source of energy for the radiotelephone installation is required, means shall be provided for energizing the light from such source of energy also.

(6) *Loudspeaker.* One or more loudspeakers capable of effective operation at all speech frequencies from 300 to 2500 cycles per second shall be provided so as to permit telephone reception at the principal operating location and at any other location where listening required by § 8.202 (d) is performed.

(7) *Antenna radio frequency indicator.* Transmitters installed after June 1, 1958, and all transmitters after June 1, 1960, regardless of installation date, shall be equipped with a device which will provide continuous visual indication that the transmitter is supplying radio frequency power to the antenna, either directly or through the medium of a transmission line.

(8) *Protective devices.* The radiotelephone installation shall be adequately protected by suitable devices, such as fuses or circuit breakers, from excessive currents and voltages which could cause damage to the components thereof.

(9) *Nameplate.* A durable nameplate shall be mounted on the radiotelephone transmitting and receiving equipment or shall be made an integral part thereof. When the transmitter and receiver comprise a single unit, one nameplate shall be sufficient. The nameplate shall show at least the following:

(i) The name of the manufacturer;

(ii) The type or model number.

§ 8.546 *Sensitivity of receiving equipment.* Any receiving equipment provided as part of the required radiotelephone installation shall be capable of a sensitivity on any required reception frequency of at least 50 microvolts in the case of medium frequency equipment and 1 microvolt in the case of very-high-frequency equipment. Sensitivity of the receiver is expressed as the radio frequency signal in microvolts modulated 30 percent at 400 cycles per second which must be delivered to the antenna terminals of the receiving apparatus through a suitable artificial antenna in order to produce an audio output of 50 milliwatts of power to the loudspeaker with a signal-to-noise ratio of at least 6 decibels. Evidence of a manufacturer's rating or a demonstration of the sensitivity of a required receiver computed upon this basis shall be furnished upon request of a Commission representative.

§ 8.547 *Location of radiotelephone installation.* (a) The requirements set out in this section apply only to vessels of more than 100 gross tons.

(b) The radiotelephone transmitter, receiver, and all controls necessary for their proper use and operation, shall be located in the upper part of the ship. For this purpose, the upper part of the ship shall be considered to include locations at wheel house level or those which are at least one deck above the vessel's main deck. If the principal operating location is not in the room from which the vessel is normally steered or not in a room adjacent to and opening directly into such room, an interior two-way voice communication system including an attention signalling system shall be provided between such room and the principal operating location. In the case of radiotelephone installations fitted on board a vessel after March 1, 1957, the principal operating location shall be in the room from which the vessel is normally steered.

§ 8.548 *Control of radiotelephone installations.* (a) The provisions of paragraph (b) of this section apply only to vessels of more than 100 gross tons. The provisions of paragraph (c) of this section apply to all vessels subject to Title III, Part III of the Communications Act, regardless of tonnage.

(b) If the radiotelephone installation is operated from any other position than the principal operating location, it shall always be possible to take control of the operation of the radiotelephone installation at the principal operating location as follows:

(1) Except as provided in subparagraph (2) of this paragraph, a method shall be provided for taking control at the principal operating location as herein prescribed which is direct, positive, and independent of action by any person who is not at the principal operating location.

(2) The use of an interior shipboard communication system between the principal operating location and all other locations at which there is a radiotelephone operating position shall be acceptable as a method for taking control at the principal operating location as herein prescribed on condition that the communication thereby is reliable, effective, immediately available at all times, and is usable independently of any other interior communication circuit: *Provided,* That in the case of radiotelephone installations first placed in service on or after March 1, 1957, the use of such a method for taking control at the principal operating location shall be acceptable only in the case of those radiotelephone operating positions located in the chart room or master's quarters.

(c) The radiotelephone installation shall be so designed that, when a qualified operator is present at the principal operating location, switching between required frequencies from such location may be performed within a period of five seconds and changeover from transmission to reception and vice versa may be accomplished within a total period of two seconds under circumstances which do not require a change in operating radio channel at the same time. The receiver shall be capable of accurate and convenient selection of the required frequencies without manual tuning, i. e., it shall be pre-set for reception on each of the required frequencies. This shall not preclude the use of a separate manually tunable receiver if provided for maintaining the required watch as a part of the required radiotelephone installation.

§ 8.549 *Test of the radiotelephone installation.* Unless the normal use of the radiotelephone installation required by Title III, Part III of the Communications Act demonstrates that the equipment is in proper operating condition for an emergency, a test communication for the purpose shall be made by a qualified operator each day the vessel is navigated. When this test is performed by some person other than the master and the equipment is found not to be in proper operating condition for an emergency, the master shall be notified promptly thereof.

SUBPART S—TYPE APPROVAL OF COMPULSORY SHIPBOARD EQUIPMENT

§ 8.551 *Scope of type approval.* (a) Approval by the Commission of a particular type of equipment in accordance with the provisions of any section or sections of this subpart, for use on board ships for the purpose of compliance with Part II of Title III of the Communications Act, is extended to all equipment of the same identical type, design, and construction, which is manufactured by the same person.

(b) For the purpose of determining compliance with sections 351 (a), 355 (c), (d), (e), and 358 (a) of the Communications Act, the term "transmitter" means a transmitter proper, together with all auxiliary equipment which is deemed necessary to make this unit operate efficiently as a main and/or emergency transmitter in a ship station at sea. For this purpose, each separate motor-generator, rectifier or other unit required to convert the power available as a primary source or sources on the ship, to the phase, frequency, and/or voltage necessary to energize the transmitter proper is construed to be a component of the transmitter.

§ 8.552 *Requirements for main transmitter.* (a) A main electron-tube transmitter, regardless of the date of its completion, installation, or modification, will be type-approved by the Commission as capable of meeting the relevant requirements of section 355, paragraphs (c) and (d), of the Communications Act if it is demonstrated to the satisfaction of the Commission that the transmitter involved, or a transmitter of the same identical type, is capable of meeting the specific requirements of paragraphs (b), (c), and (d) of this section: *Provided,* That if deemed necessary, a demonstration of the capabilities of an individual main transmitter installed on board a ship may be required to determine compliance with any or all of the following provisions of this section before initial or continued type approval of such transmitter will be given by the Commission.

(b) Tabulation of basic technical requirements:

Operating carrier frequency	Frequency tolerance (percent)	Class of emission	Percentage[1] modulation (for amplitude modulation)	Modulation frequency (for amplitude modulation)	Antenna power
500 kc	0.1	A2	Not less than 70; not more than 100.	At least 1 frequency between 300 and 1250 cycles per second; except for transmitters installed after July 1, 1951, at least 1 frequency between 450 and 1250 cycles per second.	Not less than 200 watts into an average ship station antenna.
Do	do	A1			Not less than 160 watts into an average ship station antenna.
410 kc and one authorized working frequency in the band 415 to 490 kc.	do	A2	Not less than 70; not more than 100.	At least 1 frequency between 300 and 1250 cycles per second; except for transmitters installed after July 1, 1951, at least 1 frequency between 450 and 1250 cycles per second.	Not less than 200 watts into an average ship station antenna.
Do	do	A1			Not less than 160 watts into an average ship station antenna.

[1] In determining percentage modulation, the following concept is taken into account. In linear modulation, the average amplitude of the envelope is equal to the amplitude of the unmodulated wave, provided there is no zero-frequency component in the modulating wave (as in telephony). For modulating waves having unequal positive and negative peaks, positive and negative modulative factors may be defined as the ratios of the maximum departures (positive and negative) of the envelope from its average value, to its average value.

For the purpose of these specific requirements, the term "average ship station antenna" means an actual antenna installed on board ship having a capacitance of 750 micromicrofarads and an effective resistance of 4 ohms at a frequency of 500 kilocycles, or an artificial (dummy) antenna having the same electrical characteristics.

(c) A main transmitter shall be capable of efficient operation at its required antenna power when adjusted to any required operating frequency and when energized by the main power supply of the ship station in which it is installed or a power supply equivalent thereto: *Provided,* That the potential of the main power supply or equivalent power supply is maintained within the tolerance specified in § 8.503; shall be capable of being adjusted rapidly for operation on any one of its required operating frequencies; and shall conform with all other applicable rules of this part.

(d) A main transmitter shall be equipped with suitable indicating instruments of standard accuracy and reliability to measure (1) the current in the antenna circuit, (2) the potential of the heating current applied to the cathode or cathode heater of each electron tube or a potential directly proportional thereto, and (3) the anode current of the radio frequency oscillator or amplifier which supplies power to the antenna circuit, or in lieu thereof, the anode current of such oscillator or amplifier plus the anode current of any other radio or audio frequency oscillator(s) or amplifier(s) normally employed as part of the transmitter.

(e) Measurements for the purpose of demonstrating compliance with the specific requirements of this section shall be made by methods acceptable to the Commission.

(1) The antenna power shall be determined by the product of the square of the antenna current and the antenna resistance at the operating carrier frequency, both measured at the same point in the antenna circuit and at approximately ground potential.

(f) Each transmitter which was not in existence prior to February 1, 1938, but which is installed after that date on board a vessel in order to comply with the provisions of this section, shall be furnished with a durable name plate with the month and year of its completion permanently inscribed thereon.

(g) (1) A main transmitter, completed prior to January 1, 1952, shall be provided with an arrangement for conveniently reducing the plate input power of such transmitter to approximately one-half of its rated plate input power.

(2) A main transmitter, completed in construction subsequent to January 1, 1952, which is capable of a plate input power exceeding 450 watts, shall be provided with an arrangement readily permitting the use of a plate input power for telegraphy which is not in excess of 200 watts; unless there is available in the same station a duly authorized radiotelegraph transmitter capable of operation on the radio-channels required for a main transmitter, capable of being energized by a source of power other than the emergency power supply installed for compliance with applicable provisions of treaty or statute, and not capable of a plate input power in excess of 450 watts when operated on frequencies within the band 405 kc to 535 kc.

§ 8.553 *Requirements for emergency transmitter.* (a) An emergency electron-tube transmitter will be type-approved by the Commission as capable of meeting the relevant requirements of section 355 (c) and (f) of the Communications Act if it is demonstrated to the satisfaction of the Commission that the transmitter involved, or a transmitter of the same identical type, is capable of meeting the requirements of paragraphs (b), (c) and (d) of this section when energized for a period of at least six continuous hours by a power supply equivalent to the radio station emergency power supply which is, or will be, available on board the vessel on which the transmitter is, or will be, installed and operated: *Provided*, That if deemed necessary a demonstration of the capabilities of an individual emergency transmitter installed on board a ship may be required to determine compliance with any or all of the following provisions of this section before initial or continued approval of such transmitter will be given by the Commission.

(b) Tabulation of basic technical requirements:

Operating carrier frequency	Frequency tolerance (percent)	Class of emission	Percentage modulation [1] (for amplitude modulation)	Modulation frequency (for amplitude modulation)	Antenna power
500 kc	0.1 percent except for emergency transmitters whose use is confined solely to safety communication as defined in § 8.6 (a). Such transmitters shall maintain a frequency tolerance of 0.3 percent.	A2	Not less than 70; not more than 100.	At least 1 frequency between 300 and 1250 cycles per second; except for transmitters installed after July 1, 1951, at least 1 frequency between 450 and 1250 cycles per second.	Not less than 25 watts into an average ship station antenna.
410 kc and 1 authorized working frequency in the band 415 to 490 kc.	do	A2	do	do	Do.

[1] In determining percentage modulation, the following concept is taken into account. In linear modulation, the average amplitude of the envelope is equal to the amplitude of the unmodulated wave, provided there is no zero-frequency component in the modulating wave (as in telephony). For modulating waves having unequal positive and negative peaks, positive and negative modulative factors may be defined as the ratios of the maximum departures (positive and negative) of the envelope from its average value, to its average value.

For the purpose of these specific requirements, the term "average ship station antenna" means an actual antenna installed on board ship having a capacitance of 750 micromicrofarads and an effective resistance of 4 ohms at a frequency of 500 kilocycles, or an artificial (dummy) antenna having these same electrical characteristics.

(c) In addition to the specific requirements in paragraphs (a) and (b) of this section, an emergency transmitter shall be capable of efficient operation at its required antenna power when adjusted to any required operating frequency and, when energized by the emergency power supply of the ship station in which it is installed or by a power supply equivalent thereto, shall be capable of being adjusted rapidly for operation on any one of its required operating frequencies, and shall conform with all other applicable rules of this part.

(d) An emergency transmitter shall be equipped with suitable indicating instruments of standard accuracy and reliability to measure the current in the antenna circuit and, if completed by the manufacturer after January 1, 1944, the potential of the heating current applied to the cathode or cathode heater of each electron tube or a potential directly proportional thereto.

(e) Measurements for the purpose of demonstrating compliance with the specific requirements of this section shall be made by methods acceptable to the Commission.

(1) The antenna power shall be determined by the product of the square of the antenna current and the antenna resistance at the operating carrier frequency, both measured at the same point in the antenna circuit and at approximately ground potential.

(f) Each transmitter which was not in existence prior to February 1, 1938, but which is installed after that date on board a vessel in order to comply with the provisions of this section, shall be furnished with a durable name plate with the month and year of its completion permanently inscribed thereon.

§ 8.554 *Requirements for auto-alarm.* (a) To be approved by the Commission pursuant to section 3 (x) of the Communications Act subsequent to January 1, 1951, each type of auto-alarm not approved prior to that date shall comply with the following requirements: *Provided, however,* That the Commission may, in its discretion, approve an automatic alarm receiver which complies with these requirements and can be actuated by the distress signal for radiotelegraphy: *Provided, further,* That prior to the effective date of the Safety Convention (London, 1948) the Commission may, in its discretion, approve subsequent to January 1, 1951, a type of auto-alarm which is not less efficient nor less reliable than any type approved prior to that date, and which complies with some, but not necessarily all, of the requirements set forth in this section.

(1) *Basic technical requirements.* (i) The auto-alarm shall be capable of being operated by either three or four consecutive dashes when the dashes vary in length from 3.5 to as near 6 seconds as possible and the spaces vary in length between 1.5 seconds and the lowest practicable value, preferably not greater than 10 milliseconds.

(ii) In the absence of interference of any kind, without manual adjustment during operation, the auto-alarm shall be capable of positive and reliable operation with a minimum available signal of 100 microvolts from the antenna circuit. It shall be capable under these conditions of operation on signals of the following classes of emission:

(*a*) A2 (carrier modulated 30 percent at each modulation frequency from 300 to 1350 cycles per second, inclusive).

(*b*) B (at each tone frequency from 300 to 1350 cycles per second, inclusive).

(iii) The overload capacity must be sufficient to enable the auto-alarm to operate with inputs from the antenna circuit up to 1 volt, under normal operating conditions.

(iv) The auto-alarm shall respond to the alarm signal through interference (provided it is not continuous) caused by atmospherics and powerful signals other than the alarm signal. In the presence of atmospherics or interfering signals, the auto-alarm shall automatically adjust itself so that within a reasonably short time it approaches, in so far as is practicable, the condition in which it can most readily distinguish the alarm signal.

(v) The auto-alarm receiver shall be capable of operating when the received auto-alarm signals have a radio frequency of 500 kilocycles with a sensitivity as set forth in subdivision (ii) of this subparagraph and shall, in addition, respond without adjustment and with the same sensitivity to signals having any radio frequency from 492 to 508 kc, inclusive. With respect to the reception of signals having a radio frequency outside the band 492 to 508 kc, the sensitivity of the auto-alarm shall decrease as rapidly as possible, in conformity with the best engineering practice.

(vi) The auto-alarm must not be operated, so as to actuate the warning device, by atmospherics or by any signal from the antenna circuit other than the alarm signal: *Provided,* That received signals other than the alarm signal itself do not in fact constitute a signal falling within the tolerance limits indicated in subdivision (i) of this subparagraph.

(vii) When operated by an alarm signal, or in the event of failure of the auto-alarm apparatus, the auto-alarm shall cause a continuous audible warning to be given in the principal radiotelegraph operating room, in the radio operator's cabin, and on the bridge. In so far as may be practicable, the audible alarm shall also be given in the event of any failure of the auto-alarm system, as a whole, which results in the auto-alarm becoming inoperative.

(viii) For the purpose of regularly testing the auto-alarm, without connection to the antenna, the apparatus shall include a generator pre-tuned to the 500 kc distress frequency and a keying device by means of which an alarm signal of minimum strength approximately as indicated in subdivision (ii) of this subparagraph is produced solely for actuating the particular auto-alarm and is not radiated beyond the immediate area of the vessel.

(2) *Requirements as to construction.* (i) The auto-alarm shall consist essentially of:

(*a*) A radio receiver capable of receiving emissions of classes A2 and B over the entire frequency range 492 to 508 kc, inclusive.

(*b*) A selector device capable of selecting the alarm signal specified under subparagraph (1) (i) of this paragraph.

(*c*) A suitable form of audible alarm (minimum of 3 units required).

(*d*) A testing device to determine locally that the auto-alarm system is effectively operative.

(ii) The auto-alarm may be constructed in one or more units, but must be independent of the ship's regular radio receiving apparatus.

(iii) A telephone jack shall be provided to permit reception, if desired, by a telephone receiver.

(iv) Tuning and timing controls shall not be accessible to the exterior of the device and shall be so designed and housed as to permit adjustment with special tools only.

(v) Once set into operation the audible alarms must continue to function until switched off in the principal radiotelegraph operating room.

(vi) A nonlocking or momentary-throw switch shall be provided to permit temporary disconnection of the audible alarm on the bridge and in the operator's quarters when the auto-alarm system is being tested.

(vii) The receiver and selector shall be of rugged construction throughout, capable of withstanding continuous and severe vibration equivalent to conditions that may be experienced on board a ship under the worst possible conditions and capable of continuous operation over long periods of time.

(viii) All units of the auto-alarm system shall be designed and constructed in accordance with generally accepted principles and practices of modern electronic engineering.

(ix) The auto-alarm system shall not be affected by sudden changes in ambient temperature between zero degrees centigrade and 50 degrees centigrade, shall not be affected by salt atmosphere, and by humidity conditions as high as 90 percent at a temperature of 40 degrees centigrade.

(x) Condensers, transformers, or other units shall not contain compounds which will flow at temperatures below 85 degrees centigrade, which will crack at temperatures above 0° centigrade, which are hygroscopic or which contain any corrosive substance.

(3) *Requirements as to testing and approval.* (i) Before an auto-alarm receiver will be approved by the Commission pursuant to paragraph (x) of section 3 of the Communications Act, a sample type of such auto-alarm receiver must be submitted for the purpose of demonstrating by means of suitable laboratory and field tests, that it complies with these requirements. Such tests will be conducted by the Commission, and other cooperating United States Government departments or agencies as may be appropriate, under the test specifications set forth under subparagraph (5) of this paragraph.

(ii) Failure to pass any specified test may result, by order of the Commission, in the discontinuance of all tests on the unit or component involved and the immediate rejection of the entire apparatus.

(iii) Manufacturers' tests of the complete device and/or of any components thereof shall be conducted in the laboratory or shop of the manufacturer(s). These tests shall be carried out in accordance with the provisions of subparagraph (4) of this paragraph.

(iv) Laboratory tests conducted by the Commission and/or by any other cooperating United States Government department or agency as may be appropriate, under test specifications prescribed by the Commission shall be at the expense of the manufacturer or person submitting the device for approval. A report of the tests conducted by the Commission, and/or other Government department, will be available to the Commission only: *Provided,* That such reports will be made available to the manufacturer involved at a subsequent date to be determined by the Commission.

(4) *Requirements as to manufacturers' tests.* (i) The following tests shall be conducted by the manufacturer of the auto-alarm device, who shall submit data in affidavit form showing that such tests have been made as hereinafter required prior to submission of a working model for type tests: *Provided, however,* That properly authenticated data obtained from manufacturers of parts used in the construction of the device may be submitted in lieu of the results of such tests conducted by the manufacturer of the complete device. The Commission may require that any or all of the prescribed tests be witnessed by its representative(s).

(*a*) The insulation resistance of the windings and terminals to case and core of transformers and electromagnet coils and the dielectric resistance of condensers shall be measured and data recorded for the information of the Commission.

(*b*) Transformers and/or electromagnet coils shall be energized continuously under normal conditions of operation for a period of one hour at an ambient temperature of 25 degrees centigrade. For purposes of making this test, maximum rated voltage at rated frequency with the secondary of transformers normally loaded and with the frame or enclosure grounded will be applied. Under these conditions the temperature of each transformer and/or electromagnet coil shall not be such as to affect injuriously any of the material used in construction and the temperature rise of the unit undergoing test shall not exceed 40 degrees centigrade at the end of one hour.

(*c*) Immediately after each transformer and/or electromagnet coil has been tested under (*a*) of this subdivision, a test for breakdown capability will be made by applying between windings and between each winding and the core or enclosure, for a period of five minutes, a potential ten times the maximum rated effective potential of the circuit in which the coil or winding is connected.

(*d*) All components containing wax or other sealing, insulating or electrolytic compounds shall be placed in an oven and the ambient temperature brought to 75 degrees centigrade and maintained for a period of 15 minutes. They shall then be placed in a refrigerator and the ambient temperature brought to zero degrees centigrade and maintained for a period of 15 minutes. If sealing, insulating or electrolytic compounds flow during this oven test or crack during this refrigerator test, these units will not be acceptable for use as components in the device. The electrical characteristics of each unit shall be measured at these temperatures and any deviations from their normal ratings that would adversely affect the operation of the auto-alarm device shall preclude the use of that component.

(5) *Requirements as to laboratory tests.* (i) The following tests shall be conducted at the Commission's Laboratory at Laurel, Maryland, and shall be at the expense of the manufacturer or person submitting the auto-alarm for approval. The report of these tests will be furnished to the Commission only. Tests will be conducted as described in the following paragraphs with the auto-alarm connected to an artificial antenna consisting of a 20 microhenry inductance, a 500 micromicrofarad capacitor and a 5 ohm resistor connected in series. The receiver will be tested with its internal sensitivity control (if provided) set at maximum sensitivity, except where otherwise specified.

(*a*) Test of sensitivity of the auto-alarm at the radio frequency 500 kc to determine operation of the aural warning device.

(*1*) Measurement of minimum alarm signal input, A2 emission, 30 per cent modulated with a 300 cycles per second tone, required to operate aural warning device.

(*2*) Test of operation using 100 microvolts alarm signal input, A2 emission, 30 percent modulated with a 300 cycles per second tone.

(*3*) Test of operation using 1 volt alarm signal input, A2 emission, 30 percent modulated with a 300 cycles per second tone.

(*4*) Using A2 emission, 30 percent modulated with a 1350 cycles per second tone, test as in (*a*) (*1*), (*2*), and (*3*).

(*5*) Test of aural warning device operation with 50 microvolts noise input and 100 microvolts alarm signal, A2 emission, 30 percent modulated with a 300 cycles per second tone.

(*b*) Test to determine operation of aural warning device from a 100 microvolts alarm signal, A2 emission, 30 percent modulated with a 300 cycles per second tone transmitted on any radio frequency or frequencies selected by the Commission from 492 to 508 kc, inclusive.

(*c*) Test of auto-alarm operation with internal receiver sensitivity control (if provided) set at minimum setting at which 100 microvolts input on the radio frequency 492 kc will operate aural warning device with simultaneous inputs of 100 microvolts auto-alarm signal, A2 emission, 30 percent modulation with an 800 cycles per second tone on 492 kc and 200,000 microvolts, A2 emission (800 cycles per second modulation) unkeyed signal on the frequency 350 kc; similar tests with the same alarm signal and a

25,000 microvolts, A2 emission (800 cycles per second modulation) unkeyed signal on the frequency 460 kc; similar test with internal receiver sensitivity control (if provided) set at minimum setting at which 100 microvolts input on the frequency 508 kc will operate aural warning device with simultaneous input of A2 emission (800 cycles per second modulation) unkeyed signal on the frequency 540 kc at 25,000 microvolts; and similar test with this latter signal on the frequency 650 kc at 200,000 microvolts.

(*d*) Test of selector response to dashes from 3.5 up to 6.0 seconds in duration when the spaces between the dashes have a duration from 10 milliseconds to 1.5 seconds. These tests shall be made on the radio frequency 500 kc with an input of 100 microvolts, A2 emission, 30 percent modulated with 300 cycles per second tone.

(*e*) Test of ability to avoid selector response to the radio telegraph radiolocation signal "MO," the "M" being sent in 3.5 seconds and the "O" in 4.5 seconds with 0.1 second space between dashes. These tests shall be made on the radio frequency 500 kc using 100 microvolts input, A2 emission, 30 percent modulated with a 300 cycles per second tone.

(*f*) Test of ability of the aural warning device to operate satisfactorily when the auto-alarm becomes inoperative under the following conditions:

(*1*) Filament burn-out of any electron tube in the apparatus;

(*2*) Failure of power supply.

(*g*) Tests to determine capability of proper operation of auto-alarm over long periods of time under any condition which may be expected on board ships while being navigated during extreme weather and sea conditions.

(*1*) The auto-alarm device shall be placed in operation for a period of one hour while subjected to each of the following conditions of temperature and relative humidity:

(*i*) 50 degrees centigrade and 50 percent relative humidity;

(*ii*) 30 degrees centigrade and 95 percent relative humidity;

(*iii*) Zero centigrade and 50 percent relative humidity.

(*2*) The auto-alarm device shall be placed in operation for a sufficient length of time under the following conditions to determine whether or not it will operate properly under such conditions:

(*i*) While the device is being rocked in such manner as to simulate a roll and pitch of 45 degrees from the vertical.

(*ii*) When subjected to severe vibration comparable to that which might be experienced on board ship, as for example when subjected to vibrations having a period between 20 and 30 cycles per second and an amplitude (0.03 inch total excursion, i. e., 0.015 inch each side of the position of rest) of at least 0.03 inch in a direction at an angle of 30 to 45 degrees with the base of the device.

(*h*) Test of the testing device incorporated in the auto-alarm.

(*i*) Tests to determine satisfactory operation of the apparatus on a 500 kc alarm signal at temperatures of approximately 20 and 50 degrees centigrade. Tests to be made on the frequencies 500, 492 and 508 kc with an input of 100 microvolts, A2 emission, modulated 30 per cent with a 300 cycles per second tone.

(*j*) General inspection of electrical and mechanical features.

(6) *Requirements as to field test.* (i) This test shall be conducted 24 hours a day for a period of not less than 30 consecutive days and shall be for the purpose of ascertaining the reliability of the auto-alarm and its freedom from false operation under practical interference conditions. For this test the auto-alarm shall be connected to an antenna typical of the average main antenna on shipboard and its operation shall be observed continuously during this period.

(ii) During this test period a minimum of 500 test alarm signals shall be transmitted locally while the test antenna is connected to the auto-alarm. The power used for the production of this test alarm signal shall be produced by a suitable radio frequency generator coupled to the antenna system. The receiver internal sensitivity adjustment (if provided) shall be set at the value designated by the manufacturer. During the official test period, adjustment of the auto-alarm shall not be made more than once in each 12 consecutive hours.

(iii) Tests for response to the alarm signal shall be made on at least the radio frequencies 492, 500, and 508 kc in a proportion on each frequency as determined by the Commission.

(b) Each type of auto-alarm approved by the Commission prior to July 23, 1951, is approved as to its type, for use on board ship as provided by section 353 of the Communications Act or by the applicable provisions of the Safety Convention, until such time as the Commission, in consideration of developments with respect to improved types of auto-alarms, may terminate, in accordance with appropriate rule making proceedings, such type approval.

NOTE: The provisions of this paragraph supersede any provisions of any order promulgated by the Commission prior to July 23, 1951, which are in conflict herewith.

(c) No change shall be made in any auto-alarm under the type approval identification issued by the Commission, except upon specific authorization by the Commission to make such change(s). When it is desired to make any change, an application therefor, together with pertinent detailed information shall be submitted to the Commission for consideration and appropriate action.

(d) Type approval of an auto-alarm when given by the Commission, may be for a limited period of time only, and is subject to withdrawal if the device proves defective in service and cannot be relied upon under usual conditions of maintenance and operation encountered on board ships at sea. Withdrawal of approval means that no further devices of the particular model affected may be installed, but will not immediately apply to such devices already installed unless it is found that there has been an unauthorized change in design or construction, or the material or workmanship is defective.

§ 8.555 *Requirements for automatic-alarm-signal keying device.* (a) To be approved by the Commission for use in compliance with § 8.508 and to be recognized as being capable of functioning in compliance with §§ 8.508 and 8.509. Each type of automatic-alarm-signal keying device shall comply with the requirements set forth in this section.

(b) No change shall be made in any automatic-alarm-signal keying device under the type approval identification issued by the Commission, except upon specific authorization by the Commission to make such change(s). When it is desired to make any change, an application therefor, together with pertinent detailed information shall be submitted to the Commission for consideration and appropriate action.

(c) Type approval of an automatic-alarm-signal keying device when given by the Commission, may be for a limited period of time only, and is subject to withdrawal if the device proves defective in service and cannot be relied upon under usual conditions of maintenance and operation encountered on board ships at sea. Withdrawal of approval means that no further devices of the particular model affected may be installed, but will not immediately apply to such devices already installed unless it is found that there has been an unauthorized change in design or construction, or the material or workmanship is defective.

(1) *Basic technical requirements.* (i) The automatic-alarm-signal keying device may consist of one or more units, either separate and distinct from other units of the ship's radio installation or may be incorporated, if approved by the Commission, as part of any other unit.

(ii) The device shall be designed so as to properly operate, on board ships at sea, the normal keying circuits of any transmitter approved by the Commission for use as a main or as an emergency transmitter in compliance with section 355 of the Communications Act of 1934, as amended. A list of transmitters approved by the Commission for this purpose will be furnished upon request.

(iii) Timing-adjustment controls shall not be accessible from the exterior of the device and shall be designed and housed so as to prevent adjustment by unauthorized persons.

(iv) The keying mechanism shall operate so as to repeatedly transmit the alarm signal. For this purpose the dashes transmitted shall have a duration within the limits of 3.8 to 4.2 seconds, and spaces between each of the twelve dashes constituting a series shall have a duration within the limits of 0.8 to 1.2 seconds. Spaces between each series of twelve dashes shall have a duration within the limits of 0.8 second to one minute.

(v) A single control, protected so as to avoid accidental manipulation, shall be provided for placing the device itself into full operation within a maximum period of 30 seconds. Once set into operation, the device shall be capable of continuously and properly operating without further attention for a period of not less than one hour.

(vi) The automatic-alarm-signal keying device shall be capable of being energized solely by a source of power independent of the propelling power of the ship and independent of any other system: *Provided, however*, That the device may be energized by the radio station emergency power supply and any storage battery power supply regularly used for operating a required automatic alarm receiver.

(vii) When the proper operation of the device is dependent upon the maintenance of any inherent conditions of operating within relatively narrow limits, the Commission, as a provision of its approval, may prescribe such limits and require that the device shall include means for indicating to the operator when deviations from the conditions occur.

(viii) Instructions concerning the proper adjustment of the device and the correct indication of any instrument incorporated for the purpose of revealing improper operation, shall be inscribed in a durable manner on a plate mounted on the device in a position to be easily read by the operator.

(ix) Means shall be provided to insure that when the "on-off" control of the device is placed in the "off" position, the keying circuit to the radio transmitter(s) is automatically opened.

(2) *Requirements as to construction.* (i) The design of the automatic-alarm-signal keying device shall be in accordance with the modern engineering practice and the device shall be capable of operating under conditions of constant and severe vibrations and extreme variations of temperature and humidity equivalent to those experienced on board ships at sea under the worst possible conditions. This requirement applies only to use of the device on board such types of vessels as are normally subject to Title III, Part II of the Communications Act.

(ii) A durable nameplate shall be mounted on each device showing the name of the manufacturer, the type and serial number and the month and year of completion by the manufacturer. However, this nameplate need not be provided on a working model submitted to the Commission for type testing and approval.

(3) *Requirements as to testing and approval.* (i) Before an automatic-alarm signal keying device is approved by the Commission, a working model of the particular type for which approval is desired shall be submitted for inspection, and it shall be demonstrated by means of suitable type tests that it complies with these requirements. The model equipment will be operated in these tests in the same way and under conditions similar to those encountered in actual service. In connection with such tests, the manufacturer shall supply all instructions and/or services which are intended to be supplied to the purchaser of the equipment, including a proposed instruction book and a tentative list of spare parts as would normally be supplied with shipboard installations.

(ii) Failure to pass any specified test may result, by order of the Commission, in the discontinuance of all tests on the particular device involved and in the immediate rejection thereof: *Provided*, That the Commission, within its discretion, may relax to a reasonable extent the provisions of subparagraph (4) of this paragraph, Requirements as to manufacturers' tests, with respect to an automatic-alarm signal keying device which is included as an integral part of any automatic-alarm receiver approved by the Commission and completed by the manufacturer prior to the effective date of these requirements and type tests.

(iii) Manufacturers' tests of the complete device and/or of any components thereof shall be conducted in the laboratory or shop of the manufacturer(s). These tests shall be carried out in accordance with the following requirements under the heading "manufacturers' tests" and at the expense of the manufacturer or person submitting the device for approval.

(iv) Laboratory tests shall be conducted by the Commission, and/or by any other cooperating United States Government department as may be appropriate, under test specifications prescribed by the Commission and shall be at the expense of the manufacturer or person submitting the device for approval. A report of the tests conducted by the Commission, and/or other government department, will be available to the Commission only: *Provided*, That such reports will be made available to the manufacturer involved at a subsequent date to be determined by the Commission.

(v) Field tests, as deemed necessary or desirable.

(4) *Requirements as to manufacturers' tests.* (i) Tests shall be conducted by the manufacturer of the automatic-alarm-signal keying device, who shall submit proof in affidavit form that they have been made as required, together with supporting data: *Provided, however*, That properly authenticated data obtained from manufacturers of parts used in the construction of the device may be submitted in lieu of the results of such tests conducted by the manufacturer of the complete device.

(ii) Sufficient tests shall be applied to all components to determine the durability of materials, character of workmanship, and that the electrical and/or mechanical characteristics are those required for efficient operation of the device.

(5) *Requirements as to laboratory tests.* (i) The automatic-alarm-signal keying device shall be capable of operating the keying circuit of any transmitter approved by the Commission for use as a main transmitter or as an emergency transmitter in compliance with section 354 of the Communications Act of 1934 (a list of the types of transmitters approved by the Commission for this purpose will be furnished upon request). For the purpose of demonstrating compliance with this requirement the transmitter keying circuit of the device shall be tested for a direct current carrying capacity of two amperes through a non-inductive resistance of 115 ohms. Terminals, electrical conductors and keying contacts shall be of sufficient size and properly spaced and insulated for these values of current and for the voltage which will necessarily be applied in this test. During this test, arcing shall not occur when the keying contacts are operated which would unduly affect the duration of the dashes and spaces between dashes, or which would otherwise adversely affect the operation of an approved radiotelegraph transmitter keyed by the device.

(ii) The automatic-alarm-signal keying device, if electrically driven, shall be capable of operation when the required electrical energy is furnished solely by an independent power supply. For the purpose of demonstrating compliance with this requirement, the following tests are prescribed:

(*a*) The device shall be operated continuously for a period of one hour from a power supply equivalent to the radio station emergency power supply or the required automatic alarm receiver storage battery power supply of vessels on which the device is to be used (Radio station emergency power supplies having potentials of 12, 24, and 110 volts are commonly used on board vessels of the United States. Twelve volt emergency power supplies are most common on these vessels. Some of the approved automatic alarm receivers used on board United States ships to date are energized by a storage battery power supply of either 6 or 24 volts), or from a separate and independent source of power furnished as an integral part of the device. For this operation test the potential of the electrical power supply, if used, shall be varied over a voltage range of plus or minus 15 per cent of the rated potential of such power supply, during which the transmitted dashes shall have a duration within the limits of 3.8 to 4.2 seconds, and spaces between dashes shall have a duration within the limits of 0.8 to 1.2 seconds.

(*b*) The electrical circuits of the device shall be inspected and tested as may be necessary to determine whether or not they are properly fused for adequate protection of the device and the power supply.

(iii) The automatic-alarm-signal keying device shall be capable of properly operating the keying circuit of an approved radiotelegraph transmitter so as to transmit the alarm signal for a continuous period of one hour, under any condition which may be expected on board ships while being navigated during extreme weather and sea conditions. For this purpose the following tests are prescribed in addition to the test prescribed in subdivision (ii) of this subparagraph.

(*a*) The keying device shall be placed in operation for a period of one continuous hour while subjected to each of the following conditions of temperature and relative humidity:

(*1*) 50 degrees centigrade and 50 percent relative humidity.

(*2*) 30 degrees centigrade and 95 percent relative humidity.

(*3*) Zero centigrade and 50 percent relative humidity.

(*b*) The keying device shall be placed in operation for a sufficient length of time under the following conditions to determine whether or not it will operate properly under such conditions:

(*1*) While the keying device is being rocked in such a manner as to simulate a roll and pitch of 45 degrees from the vertical, that is, over an arc of 45 degrees in two planes normal to the horizon and perpendicular to each other.

(2) When subjected to severe vibration comparable to that which might be experienced on board ship, as for example when subjected to vibrations having a period between 20 and 30 cycles per second and an amplitude (0.03 inch total excursion, i. e., 0.015 inch each side of the position of rest) of at least 0.03 inch in a direction at an angle of 30 to 45 degrees with the base of the device.

(3) The keying device shall be inspected to determine whether or not all delicate parts are properly enclosed and protected from moisture and from mechanical injury and whether or not components are accessible as may be necessary for inspection and repair, when in service.

(4) The keying device shall be inspected and tested as may be necessary to determine the effectiveness of adjustment controls and means for making these adjustments under service conditions, together with precautions taken to prevent tampering with adjustments.

(5) Indicating instruments (when provided) and operating controls shall be inspected to determine whether indication is given that the device is in satisfactory operation when the starting control is placed in the "on" position and to determine that a single control for starting and stopping is provided, capable of placing the device in full operation within 30 seconds from the time the control is placed in the "on" position.

§ 8.556 *General requirements for lifeboat radio equipment.* (a) To be approved by the Commission pursuant to § 8.520, lifeboat radio equipment shall comply with the following general requirements in addition to the applicable specific requirements set forth in §§ 8.557, 8.558 and 8.559, except that equipment to which the provisions of § 8.559 are applicable need not meet the requirements of subparagraphs (1) and (5) of this paragraph.

(1) The design, and construction of the radio equipment shall be such that no tools are required to place it in operation for routine tests or for emergency communication.

(2) The components and assembly of the entire lifeboat radio equipment shall insure the utmost dependable operation and the design shall be such that heavy vibration and physical shocks to which a lifeboat is subject will cause no damage. Components shall be housed and treated to withstand saline dampness and to minimize the adverse effect of prolonged exposure to salt water or salt spray.

(3) A durable nameplate shall be mounted on the equipment or made an integral part thereof showing at least the following:

(i) The type or model number;

(ii) The name of the manufacturer;

(iii) The month and year of manufacture.

(4) Each lifeboat equipment shall be provided with a copy of an instruction manual covering the design, installation, operation and maintenance of the equipment.

(5) Simple instructions which are durable and waterproof and suitable for the use of an unskilled person shall be permanently and conspicuously attached to the control panel or surface of the transmitter, receiver or power supply. These instructions shall contain information together with sketches covering the erection of the antenna(s) and the operation of the equipment for automatic transmission; also information as to manual transmission of the international distress signal for radiotelegraphy and the international auto-alarm signal, and a statement that the latter signal is effective only if transmitted on the frequency 500 kc.

§ 8.557 *Requirements for lifeboat portable radio equipment.* (a) There shall be provided as a single unit a portable buoyant apparatus consisting of a transmitter, receiver, power supply, grounding conductor, a collapsible rod antenna or in lieu thereof a collapsible mast, a single wire antenna, and a line for lowering the apparatus.

(1) The apparatus, as a single unit, shall be of sufficient buoyancy to float in sea water and shall be sufficiently rugged in construction to withstand physical shocks and rough handling. The apparatus shall be deemed to comply with this requirement if, after being dropped into sea water in various positions from a height of at least 20 feet, it can be operated immediately without any repair or adjustment (other than normal antenna circuit tuning) and without departure from required performance. Suitable protection shall be provided for the operating controls, indicating devices and instruments, including the head receiver, against physical harm from accidental or inadvertent blows and from the adverse effects of prolonged exposure to the weather. Operational parts of the apparatus adversely affected by immersion in sea water shall be enclosed so as to provide the necessary protection. Any such enclosure shall be deemed to be water-tight if it can be submerged in sea water so that no part is less than two inches below the surface of the water for a continuous period of two hours without leaking.

(2) The apparatus, as a unit, shall be fitted with durable handles or grips. These shall be so arranged and the distribution of the weight of the apparatus shall be such as to provide for convenient carrying by either one or two persons.

(3) Provision shall be made for securely fastening components of the apparatus, by lashing or other acceptable means, to a lifeboat thwart as may be necessary to enable easy and convenient operation of the lifeboat portable radio equipment.

(4) The apparatus exclusive of the line for lowering shall not weigh more than sixty pounds.

(5) The line for lowering shall consist of not less than 40 feet of 9 thread manila or sisal rope, or the equivalent thereof, which shall be in good condition and securely attached to the apparatus at all times.

(6) Components of the apparatus subject to loss by detachment from the unit for operation or test of the equipment shall be so arranged as to insure their availability at all times.

(7) Each apparatus shall be equipped with a durable removable plate showing clearly the lifeboat radio call sign in letters and digits and in characters of the International Morse Code.

(b) (1) The radio transmitter shall comply with the following requirements:

Operating frequencies (kilocycles)	Frequency tolerance	Type of emission	Modulation percentage (average of modulation percentage of positive and negative peaks)	Modulation frequency	Power output (into specified artificial antenna)	Artificial antenna
	Percent					
500	0.5	A2	Not less than 70.	Not less than 450 nor greater than 1350 cycles per second.	Not less than 0.25 watt.	1 ohm resistance, 75 micromicrofarads capacitance.
500	.5	A2	do	do	Not less than 1.7 watts.	10 ohms resistance, 75 micromicrofarads capacitance.
8364	.02	A2	do	do	Not less than 4 watts.	40 ohms resistance.

(2) The transmitter radio frequency and modulation frequency control circuits shall be pretuned to the required frequencies and shall be of such design and construction that the operating frequencies are maintained within the prescribed tolerances under varying voltages, antenna circuit characteristics, and other normal conditions of adjustment. The frequency control circuit adjustment(s) shall be securely locked to prevent detuning as a result of shock or vibration and shall not be readily available to the person using the transmitter.

(3) Controls shall be provided on the operating panel for efficient transfer of radio frequency energy at each required operating radio frequency to the required antenna. An initial adjustment of these controls shall effectively resonate the antenna circuit at each required operating radio frequency and this condition shall be maintained without further adjustment of these controls during a normal operating period of the transmitter.

(4) Simple and reliable controls shall be provided so that the operator of the transmitter can quickly and conveniently place it in use for: Manual operation on 500 kc, manual operation on 8364 kc, and automatic operation alternately on these two frequencies: *Provided,* That not more than one manual switch adjustment shall be necessary to place the transmitter in operation for automatic transmission. For manual radiotelegraphy the transmitter and receiver, including their controls, shall be arranged mechanically and electrically so that they can be operated efficiently and con-

veniently from the same operating position for communication on the required operating frequencies and so that the time necessary to change from transmission to reception, and vice versa, on these frequencies is as short as possible and in no event more than two seconds. For automatic operation provision shall be made as follows:

(i) On 500 kc for transmission of the international alarm signal followed by the international distress signal for radiotelegraphy, the latter to be transmitted in one or more separate groups, each group consisting of three separate distress signals.

(ii) On 8364 kc for transmission of the international distress signal for radiotelegraphy in one or more separate groups, each group consisting of three separate distress signals; this group or these groups to be followed by a continuous long dash of not less than 30 seconds in duration.

(iii) For transmission of the specified signals by automatically changing the operating frequency of the transmitter from 500 kc to 8364 kc and vice versa with a transfer time interval not to exceed one second.

(iv) For completely de-energizing the receiver during such operation of the transmitter.

(v) For testing the required automatic keying arrangement without the generation of radio frequency energy.

(vi) The speed of the automatic transmission of the international distress signal shall be at a rate not in excess of 16 words per minute nor less than 8 words per minute. The alarm signal dashes shall have a duration within the limits of 3.8 to 4.2 seconds and spaces between each of the twelve dashes constituting a series shall have a duration within the limits of 0.8 to 1.2 seconds.

(5) The transmitter shall be equipped with a reliable visual indicator or indicators as may be necessary (such as neon tubes) to indicate antenna circuit resonance at each operating frequency with any antenna provided. Failure of the indicator(s) shall have no adverse effect on the actual operation of the transmitter.

(c) The receiver shall comply with the following requirements:

(1) The receiver shall, when used with a head receiver, be capable without manual tuning of receiving A2 emission over the frequency band 492 kc to 508 kc and shall be capable when manually tuned of receiving A1 and A2 emission on any frequency in the band 8266 to 8745 kc.

(2) The sensitivity of the receiver shall be such that at least 1 milliwatt of audio power is developed in a noninductive load resistor having an ohmic value substantially equal to the value of the impedance of the head receiver at 1,000 cycles per second at a signal to noise power ratio of at least 10 to 1, when the receiver is supplied through the following artificial antennas with the respective radio frequency signals:

Frequency (kilocycles)	Signal strength (microvolts)	Modulation factor	Modulation frequency (cycles per second)	Artificial antenna
500	200	0.3	400	10 ohms resistance and 75 micromicrofarads capacitance.
8364	1000	.3	400	40 ohms resistance.

The noise power present in the output of the receiver when the receiver is adjusted for the reception of type A2 emission on the frequencies 500 kc and 8364 kc shall be determined with an unmodulated input signal of the indicated strength.

(3) The selectivity of the receiver preceding the final detector shall be such that response uniform to within 6 db is obtained over the frequency range 492 to 508 kc.

(4) The audio frequency response of the receiver shall be electrically uniform to within 6 decibels over the range of frequencies between 400 and 1400 cycles per second.

(5) The receiver shall be equipped with only one manually operated volume control.

(d) The power supply shall comply with the following requirements:

(1) The source of power shall be a manually operated electric generator capable of efficiently energizing the lifeboat radio installation. The mechanical power applied to the crank handle(s) or the propelling lever(s) of the generator driving mechanism shall not exceed a maximum of 0.15 horsepower for any required condition of operation of the lifeboat radio installation at any temperature of the generator and its associated driving mechanism between minus 30 degrees and plus 125 degrees Fahrenheit. Under these conditions the speed of rotation of the crank handle(s) shall not be greater than 70 revolutions per minute nor shall the cycles of operation of the propelling lever(s) be greater than 70 cycles per minute. The voltages applied to the radio installation shall not vary from their normal values more than 20 per cent at any generator speed in excess of the normal operating speed which can be manually developed.

(e) The single wire antenna and the collapsible rod antenna or the collapsible mast provided in lieu thereof shall comply with the following requirements:

(1) The collapsible rod antenna shall be of the maximum practicable height as approved by the Commission for each particular type of lifeboat radio apparatus. The collapsible mast provided in lieu of the collapsible rod antenna shall be of the maximum practicable height as approved by the Commission for each particular type of lifeboat radio apparatus and capable of supporting the required single wire antenna.

(2) The single wire antenna shall consist of a length of at least 40 feet of extra-flexible stranded copper wire having a cross-sectional area of not less than 10,000 circular mills together with means for effective insulation of the antenna, means for fastening the wire to the antenna supports, and means for making electrical connection to the transmitter.

(f) The grounding conductor shall comply with the following requirements:

(1) The grounding conductor shall consist of a length of not less than 20 feet of No. 10 bare stranded copper wire or equivalent copper braid effectively weighted at one end for immersion in the sea. This conductor shall be securely fastened to an effective ground terminal on the apparatus.

(g) The artificial antenna shall comply with the following requirements:

(1) The artificial antenna shall provide a reliable load for the transmitter for test purposes, at the frequencies 500 kc and 8364 kc, of approximately the same electrical characteristics as the single wire antenna required by this section.

(2) The artificial antenna shall be housed in a single container and provided with appropriate terminals. If more than two terminals are provided on the artificial antenna, all the terminals shall be properly labeled.

§ 8.558 *Requirements for lifeboat non-portable radio equipment.* (a) (1) The radio transmitter shall comply with the following requirements:

Operating frequencies (kilocycles)	Frequency tolerance	Type of emission	Modulation percentage (average of modulation percentages of positive and negative peaks)	Modulation frequency	Power output (into specified artificial antenna)	Artificial antenna
	Percent					
500	0.5	A2	Not less than 70.	Not less than 450 nor greater than 1350 cycles per second.	Not less than 30 watts.	10 ohms resistance and 100 micromicrofarads capacitance.
8364	.02	A2	do	do	Not less than 40 watts.	40 ohms resistance.

(2) The transmitter radio frequency and modulation frequency control circuits shall be pretuned to the required frequencies and shall be of such design and construction that the operating frequencies are maintained within the prescribed tolerances under varying voltages, antenna circuit characteristics, and other normal conditions of adjustment. The frequency control circuit adjustment(s) shall be securely locked to prevent detuning as a result of shock or vibration and shall not be readily available to the person using the transmitter.

(3) Controls shall be provided on the operating panel for efficient transfer of radio frequency energy at each required

operating radio frequency to the required antenna. An initial adjustment of these controls shall effectively resonate the antenna circuit at each required operating radio frequency and this condition shall be maintained without further adjustment of these controls during a normal operating period of the transmitter.

(4) Simple and reliable controls shall be provided so that the operator of the transmitter can quickly and conveniently place it in use for: Manual operation on 500 kc, manual operation on 8364 kc, and automatic operation alternately on these two frequencies; provided that not more than one manual switch adjustment shall be necessary to place the transmitter in operation for automatic transmission. For manual radiotelegraphy the transmitter and receiver, including their controls, shall be arranged mechanically and electrically so that they can be operated efficiently and conveniently from the same operating position for communication on the required operating frequencies and so that the time necessary to change from transmission to reception, and vice versa, on these frequencies is as short as possible and in no event more than two seconds. For automatic operation provision shall be made as follows:

(i) On 500 kc for transmission of the international alarm signal followed by the international distress signal for radiotelegraphy, the latter to be transmitted in one or more separate groups, each group consisting of three separate distress signals.

(ii) On 8364 kc for transmission of the international distress signal for radiotelegraphy in one or more separate groups, each group consisting of three separate distress signals; this group or these groups to be followed by a continuous long dash of not less than 30 seconds in duration.

(iii) For transmission of the specified signals by automatically changing the operating frequency of the transmitter from 500 kc to 8364 kc and vice versa with a transfer time interval not to exceed one second.

(iv) The speed of the automatic transmission of the international distress signal shall be at a rate not in excess of 16 words per minute nor less than 8 words per minute. The alarm signal dashes shall have a duration within the limits of 3.8 to 4.2 seconds and spaces between each of the twelve dashes constituting a series shall have a duration within the limits of 0.8 to 1.2 seconds.

(v) For testing the required automatic keying arrangement without the generation of radio frequency energy.

(5) The transmitter shall be equipped with a radio frequency ammeter of suitable range and scale, connected so as to indicate the current in the antenna circuit for each operating frequency.

(b) The receiver shall comply with the following requirements:

(1) The receiver shall, when used with a head receiver, be capable without manual tuning of receiving A2 emission over the frequency band 492 kc to 508 kc and shall be capable when manually tuned of receiving A1 and A2 emission on any frequency in the band 8266 to 8745 kc.

(2) The sensitivity of the receiver shall be such that at least 1 milliwatt of audio power is developed in a non-inductive load resistor having an ohmic value substantially equal to the value of the impedance of the head receiver at 1,000 cycles per second at a signal to noise power ratio of at least 10 to 1, when the receiver is supplied through the following artificial antennas with the respective radio frequency signals:

Frequency (kilocycles)	Signal strength (microvolts)	Modulation factor	Modulation frequency (cycles per second)	Artificial antenna
500	25	0.3	400	10 ohms resistance and 100 micromicrofarads capacitance.
8364	100	.3	400	40 ohms resistance.

The noise power present in the output of the receiver when the receiver is adjusted for reception of type A2 emission on the frequencies 500 kc and 8364 kc shall be determined with an unmodulated input signal of the indicated strength.

(3) The selectivity of the receiver preceding the final detector shall be such that response uniform to within 6 db is obtained over the frequency range 492 to 508 kc.

(4) The audio frequency response of the receiver shall be electrically uniform to within 6 decibels over the range of frequencies between 400 and 1400 cycles per second.

(5) The receiver shall be equipped with only one manually operated volume control.

(6) The receiver shall be capable of developing a useful audio power for the purpose of the reception of type A2 emission of at least 6 milliwatts into the non-inductive load resistor prescribed in subparagraph (2) of this paragraph.

(c) The power supply shall comply with the following requirements:

(1) The power supply for the transmitter and the receiver shall consist of a storage battery. The necessary power for the transmitter and receiver, at voltages other than the battery voltages may be obtained by the use of a dynamotor or other suitable device approved by the Commission.

(d) The antenna shall comply with the following requirements:

(1) A single wire inverted L-type for use not less than 20 feet above the water line with a horizontal section of the maximum practicable length.

(e) The artificial antenna shall comply with the following requirements:

(1) The artificial antenna shall provide a reliable load for the transmitter for test purposes at the frequencies 500 kilocycles and 8364 kilocycles, of approximately the same electrical characteristics as the antenna required by paragraph (d) (1) of this section.

(2) The artificial antenna shall be housed in a single container and provided with appropriate terminals. If more than two terminals are provided on the artificial antenna, all the terminals shall be properly labeled.

(f) The ground system shall comply with the following requirements:

(1) The radio installation when installed in a metal hull lifeboat shall be effectively grounded to the hull of the lifeboat. This ground connection shall be physically located in a position where it is inaccessible to the normal movement of occupants or accessories in the lifeboat.

(2) The radio installation when installed in a lifeboat having a nonmetallic hull shall be effectively grounded to a bare plate and/or strips of a corrosion resistant metal having a total area of at least six square feet and located on the hull of the lifeboat below the waterline.

§ 8.559 *Transitional provisions for lifeboat non-portable radio equipment.* Any type of non-portable lifeboat radio equipment which complies with the former requirements of § 8.557 prior to revision (copies of former § 8.557 may be secured without charge upon request addressed to Secretary, Federal Communications Commission, Washington 25, D. C.) of that section effective December 3, 1952, shall be deemed to comply with the requirements of § 8.520 (c) provided the equipment was installed in a motor lifeboat prior to December 3, 1953, and if the equipment meets the following specific requirements from the respective dates set forth:

Requirement	*Date*
Section 8.558 (a) (1): Transmitter requirement that modulation frequency be not less than 450 cycles per second nor greater than 1350 cycles per second, if equipment installed on or after Nov. 19, 1952	Nov. 19, 1952
Section 8.558 (a) (1): Transmitter requirements applicable to transmission on 8364 kc, if equipment installed on or after Nov. 19, 1952	Nov. 19, 1953
Section 8.558 (a) (1): Transmitter requirement that modulation percentage be not less than 70	Nov. 19, 1952
Section 8.558 (a) (4): Transmitter requirements regarding an automatic keying device for operation on 500 kc and, if radio equipment installed on or after Nov. 19, 1952, also for operation on 8364 kc:	
For equipment required to be provided by reason of the provisions of the Safety Convention	Nov. 19, 1953
For equipment required by law to be provided but not so required under any provision of the Safety Convention	June 1, 1955
Section 8.558 (b): Receiver requirements regarding reception on frequencies between 8266 and 8745 kc, if equipment installed on or after Nov. 19, 1952	Nov. 19, 1953
Section 8.520 (d) (4): Provision of means for charging the radio battery after the lifeboat is launched, if equipment is installed on or after Nov. 19, 1952	Nov. 19, 1952

Requirement	*Date*
Section 8.520 (e): Radio field intensity requirement:	
For equipment required to be provided by reason of the provisions of the Safety Convention	Nov. 19, 1954
For equipment required by law to be provided but not so required under any provision of the Safety Convention	June 1, 1955

SUBPART T—VIOLATIONS

§ 8.601 *Answers to notice of violation.* (a) Any person receiving official notice of a violation of the terms of the Communications Act, any legislative act, Executive order, treaty to which the United States is a party, terms of a station or operator license, or the rules and regulations of the Federal Communications Commission, shall, within 3 days from such receipt, send a written answer to the office of the Commission originating the official notice. If an answer cannot be sent, or an acknowledgment made within such 3-day period, acknowledgment and answer shall be made at the earliest practicable date with a satisfactory explanation of the delay. The answer to each notice shall be complete in itself and shall not be abbreviated by reference to other communications or answers to other notices. The answer shall contain a full explanation of the incident involved and shall set forth the action taken to prevent a continuation or recurrence thereof. If the notice relates to lack of attention to, or improper operation of the station, or to log or watch discrepancies, the answer shall give the name and license number of the licensed operator on duty.

(b) When an official notice of violation, impending violation, or discrepancy, pertaining to any provision of Part II of Title III of the Communications Act or the radio provisions of the Safety Convention, is served upon the master or person responsible for a vessel and any instructions appearing on such document as issued by a representative of the Commission are at variance with the content of paragraph (a) of this section, then the instructions issued by the Commission's representative shall supersede those set forth in paragraph (a) of this section.

§ 8.602 *Reports of infringments of the International Radio Regulations.* In the event that infringement of the International Radio Regulations by a foreign station is detected, report thereof may be made by the submission to the Commission of a form similar to that set forth in appendix 2 of the International Radio Regulations.

SUBPART U—[RESERVED]

SUBPART V—APPENDICES

§ 8.801 *Appendix I—Location of Engineering Field Offices and Monitoring Stations.*

(a) Radio districts and addresses of engineers in charge thereof.

Radio district	Address of the engineer in charge	Territory within district—	
		States	Counties
1	1600 Customhouse, Boston 9, Mass.	Connecticut	All counties.
		Maine	Do.
		Massachusetts	Do.
		New Hampshire	Do.
		Rhode Island	Do.
		Vermont	Do.
2	748 Federal Bldg., 641 Washington St., New York 14, N. Y.	New Jersey	Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union and Warren.
		New York	Albany, Bronx, Columbia, Delaware, Dutchess, Greene, Kings, Nassau, New York, Orange, Putnam, Queen, Rensselaer, Richard, Rockland, Schnectady, Suffolk, Sullivan, Ulster, and Westchester.
3	1005 New U. S. Customhouse, Philadelphia 6, Pa.	Delaware	New Castle.
		New Jersey	Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem.
		Pennsylvania	Adams, Berks, Bucks, Carbon, Chester, Cumberland, Dauphin, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Perry, Philadelphia, Schuylkill, and York.
4	400 McCawley Building, 400 East Lombard Street, Baltimore 2, Maryland.	Delaware	Kent and Sussex.
		Maryland	All except District 24.
		Virginia	Clarke, Fairfax (except District 24) Fauquier, Frederick, Loudoun, Page, Prince William, Rappahannock, Shenandoah, and Warren.
		West Virginia	Barbour, Berkeley, Grant, Hampshire, Hardy, Harrison, Jefferson, Lewis, Marion, Mineral, Monongalia, Morgan, Pendleton, Preston, Randolph, Taylor, Tucker, and Upshur.
5	Room 402, Federal Bldg., Norfolk 10, Va.	North Carolina	All except District 6.
		Virginia	All except District 4.
6	718 Atlanta National Building, 50 Whitehall Street SW., Atlanta 3, Georgia. Sub-office: P. O. Box 77, 214 Post Office Building, Savannah, Georgia.	Alabama	All except District 8.
		Georgia	All counties.
		North Carolina	Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Cleveland, Graham, Haywood, Henderson, Jackson, McDowell, Macon, Madison, Mitchell, Polk, Rutherford, Swain, Transylvania, Watauga, and Yancey.
		South Carolina	All counties.
		Tennessee	Do.
7	P. O. Box 150, 312 Federal Bldg., Miami 1, Fla. Suboffice: 409–410 P. O. Bldg., Tampa, Fla.	Florida	All except District 8.
8	608 Federal Building, 600 South Street, New Orleans 12, Louisiana. Sub-office: 419 U. S. Courthouse and Customhouse, Mobile 10, Alabama.	Alabama	Baldwin and Mobile.
		Arkansas	All counties.
		Florida	Escambia.
		Louisiana	All counties.
		Mississippi	Do.
		Texas	City of Texarkana only.
9	324 U. S. Appraisers Bldg., 7300 Wingate St., Houston 11, Tex. Sub-office: P. O. Box 1527 (329 Post Office Building, 300 Willow Street), Beaumont, Texas.	Texas	Angelina, Aransas, Atacosa, Austin, Bandera- Bastrop, Bee, Bexar, Blanco, Brazoria, Bra, zos, Brooks, Burleson, Caldwell, Calhoun, Cameron, Chambers, Colorado, Comal, De Witt, Duval, Dimmit, Edwards, Fayette, Fort Bend, Frio, Galveston, Gillespie, Goliad, Gonzales, Grimes, Guadalupe, Hardin, Hays, Harris, Hidalgo, Jackson, Jasper, Jefferson, Jim Hogg, Jim Wells, Karnes, Kenedy, Kendall, Kerr, Kinney, Kleber, LaSalle, Lavaca, Lee, Liberty, Live Oak, Matagorda, Madison, Maverick, McMullen, Medina, Montgomery, Nacogdoches, Newton, Nueces, Orange, Polk, Real, Refugio, San Augustine, San Jacinto, San Patricio, Sabine, Starr, Travis, Trinity, Uvalde, Val Verde, Victoria, Walker, Waller, Washington, Webb, Wharton, Willacy, Williamson, Wilson, Zapata, Zavala, and Tyler.
10	P. O. Box 5238, 500 U. S. Terminal Annex Building (Houston and Jackson Streets), Dallas 22, Texas.	Oklahoma	All counties.
		Texas	All except District 9 and the city of Texarkana.
11	539 U. S. Post Office and Courthouse Bldg., Temple and Spring Sts., Los Angeles 12 Calif. Suboffice: No. 15–C U. S. Customhouse, Union and F Sts., San Diego 1, Calif. Ship Office: Room 326, U. S. Post Office and Courthouse Bldg., San Pedro, Calif.	Arizona	All counties.
		California	Imperial, Inyo, Kern, Los Angeles, Orange, Riverside, San Bernadino, San Diego, San Luis Obispo, Santa Barbara, and Ventura.
		Nevada	Clark.
12	323–A Customhouse (555 Battery Street), San Francisco 26, Calif.	California	All except District 11.
		Nevada	All except Clark
13	433 New U. S. Courthouse, 620 Southwest Main St., Portland 5, Oreg.	Idaho	All except District 14.
		Oregon	All counties.
		Washington	Wahkiakum, Cowlitz, Clark, Skamania, and Klickitat.
14	802 Federal Office Building (First Avenue and Marion), Seattle 4, Washington.	Idaho	Benewah, Bonner, Boundary, Clearwater, Idaho, Kootenai, Latah, Lewis, Nez Perce, and Shoshone.
		Montana	All counties.
		Washington	All except District 13.
15	521 New Customhouse (19th between California and Stout Streets), Denver 2, Colorado.	Colorado	All counties.
		Utah	Do.
		Wyoming	Do.
		Nebraska	Banner, Box, Butte, Cheyenne, Dawes, Deuel, Garden, Kimball, Morrill, Scotts Bluff, Sheridan, Sioux.
		South Dakota	Butte, Custer, Fall River, Lawrence, Meade, Pennington, Shannon, and Washington.
		New Mexico	All counties.

Radio district	Address of the engineer in charge	Territory within district—	
		States	Counties
16	208 Uptown Post Office and Federal Court Bldg., 5th and Washington Sts., St. Paul 2, Minn.	Minnesota	Do.
		Michigan	Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, and Schoolcraft.
		South Dakota	All counties except District 15.
		North Dakota	All counties.
		Wisconsin	All counties except District 18.
17	3100 Federal Office Building, 911 Walnut Street, Kansas City 6E, Missouri.	Iowa	Do.
		Kansas	All counties.
		Missouri	Do.
		Nebraska	All counties except District 15.
18	826 U. S. Courthouse Building, 219 South Clark Street, Chicago 4, Illinois.	Illinois	All counties.
		Indiana	Do.
		Iowa	Allamakee, Buchanan, Cedar, Clayton, Clinton, Delaware, Des Moines, Dubuque, Fayette, Henry, Jackson, Johnson, Jones, Lee, Linn, Louisa, Muscatine, Scott, Washington, and Winneshiek.
		Wisconsin	Brown, Columbia, Calumet, Crawford, Dane, Dodge, Door, Fond du Lac, Grant, Green, Iowa, Jefferson, Kewaunee, Kenosha, Lafayette, Manitowoc, Marinette, Milwaukee, Ozaukee, Oconto, Outagamie, Racine, Richland, Rock, Sauk, Sheboygan, Walworth, Washington, Waukesha, and Winnebago.
		Kentucky	All counties except District 19.
19	1029 New Federal Bldg., Detroit 26, Mich.	Kentucky	Bath, Bell, Boone, Bourbon, Boyd, Bracken, Breathitt, Campbell, Carter, Clark, Clay, Elliott, Estill, Fayette, Fleming, Floyd, Franklin, Gallatin, Garrard, Grant, Greenup, Kenton, Harlan, Harrison, Jackson, Jessamine, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, Madison, Magoffin, Martin, Mason, McCreary, Menifee, Montgomery, Morgan, Nicholas, Owen, Owsley, Pendleton, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Scott, Wayne, Whitley, Wolfe and Woodford.
		Ohio	All counties.
		Michigan	All counties except District 16.
		West Virginia	All counties except District 4.
20	328 Post Office Bldg., Buffalo 3, N. Y.	New York	All except District 2.
		Pennsylvania	All except District 3.
21	502 Federal Bldg., Honolulu 1, T. H.	Territory of Hawaii and outlying Pacific possessions, except Alaska and adjacent islands.	
22	P. O. Box 2987, 322-323 Federal Bldg., San Juan 13, P. R.	Puerto Rico, Virgin Islands.	
23	P. O. Box 644, Room 53, U. S. P. O. and Courthouse Bldg., Anchorage, Alaska. Sub-Office: P. O. Box 1421, 6, Shattuck Bldg., Juneau, Alaska.	Alaska.	
24	Briggs Building, 22d and E Streets NW., Washington 25, D. C.	District of Columbia.	All.
		Maryland	Within 10 miles of D. C. boundary.
		Virginia	Do.

(b) The offices of the Regional Managers of the Field Engineering and Monitoring Bureau are located at the following addresses:

Region No. 1—954 Federal Building, 641 Washington Street, New York 14, New York. To include: Districts Nos. 1, 2, 3, 4, 5, 20 and 24.

Region No. 2—718 Atlanta National Building, 50 Whitehall Street SW., Atlanta 3, Georgia. To include: Districts Nos. 6, 7, 8, 9, 10 and 22.

Region No. 3—323-A Customhouse (555 Battery Street), San Francisco 26, California. To include: Districts Nos. 11, 12 and 15.

Region No. 4—802 Federal Office Building (First Avenue and Marion), Seattle 4, Washington. To include: District Nos. 13, 14 and 23.

Region No. 5, P. O. Box 1142, Lanikai, Oahu, T. H.—To include: District No. 21.

Region No. 6, 832 U. S. Courthouse, Chicago 4, Ill.—To include; Districts Nos. 16, 17, 18, and 19.

(c) The primary monitoring stations of the Field Engineering and Monitoring Bureau are located at the following addresses:

Federal Communications Commission, Allegan Monitoring Station, P. O. Box 89, Allegan, Michigan.

Federal Communications Commission, Grand Island Monitoring Station, P. O. Box 788, Grand Island, Nebraska.

Federal Communications Commission, Kingsville Monitoring Station, P. O. Box 632, Kingsville, Texas.

Federal Communications Commission, Millis Monitoring Station, P. O. Box 458, Millis, Massachusetts.

Federal Communications Commission, P. O. Box 1142, Lanikai Monitoring Station, Lanikai, Oahu, Hawaii.

Federal Communications Commission, Santa Ana Monitoring Station, P. O. Box 744, Santa Ana, California.

Federal Communications Commission, Laurel Monitoring Station, P. O. Box 31, Laurel, Maryland.

Federal Communications Commission, Livermore Monitoring Station, P. O. Box 989, Livermore, California.

Federal Communications Commission, Portland Monitoring Station, P. O. Box 5165, Portland 16, Oregon.

Federal Communications Commission, Powder Springs Monitoring Station, P. O. Box 98, Powder Springs, Georgia.

(d) Secondary monitoring stations of the Field Engineering and Monitoring Bureau are located at the following addresses:

Federal Communications Commission, P. O. Box 5098, Fort Lauderdale, Florida.

Federal Communications Commission, P. O. Box 251, Chillicothe, Ohio.

Federal Communications Commission, P. O. Box 1448, Muskogee, Oklahoma.

Federal Communications Commission, Searsport, Maine, P. O. Box 44, Belfast, Maine.

Federal Communications Commission, P. O. Box 191, Spokane, Washington.

Federal Communications Commission, P. O. Box 499, Twin Falls, Idaho.

Federal Communications Commission, P. O. Box 719, Anchorage, Alaska.

Federal Communications Commission, P. O. Box 810, Fairbanks, Alaska.

§ 8.802 *Appendix II—Tables of ship radiotelegraph frequencies from 2000 kc to 23000 kc and ship radiotelephone frequencies from 4000 kc to 23000 kc.*

Table 1-a—Passenger ship radiotelegraph working frequencies between 2 Mc and 23 Mc.

Table 1-b—Ship radiotelegraph calling frequencies between 2 Mc and 23 Mc.

Table 1-c—Cargo ship [telegraph] working frequencies between 2 Mc and 23 Mc.

Table 2—Ship radiotelegraph frequency assignment plan.

Table 3—Ship radiotelephone frequencies between 4 Mc and 23 Mc.

The following procedures and tables may be used in applying for license for the frequencies listed in Tables 1 and 3 only insofar as the frequencies listed therein are consistent with the implementation and the effective dates of the Geneva Agreement (1951) and the other provisions of the Commission's rules which make frequencies available for assignment to ship stations. Frequencies assigned in accordance with this Appendix to a station on a particular vessel may be retained at the option of the applicant despite subsequent relicensing of the station to a different licensee. Frequencies appearing in the attached tables may only be used in the manner and to the extent permitted elsewhere in this part.

Ship radiotelegraph frequency columns appearing in Tables 1-a, 1-b, and 1-c designated by the symbols P1, P14, P15, C1 and F49 contain frequencies in the 4, 6, 8, 12, 16 and 22 Mc bands which are not available for assignment by the Commission. These frequencies are required for assignment exclusively to U. S. Government ship stations. The remaining 2 Mc frequencies (2067.5, 2085, 2087.5, 2089, and 2106 kc), when assigned, will not be designated by frequency column symbols.

Radiotelegraph, 2000 kc to 23000 kc. The applicant must consult Table 2, below to find out which frequency column symbols have been allocated for ships licensed to him. The frequencies designated by the symbols shown in Table 2 may be determined from Table 1, which lists all of the frequencies in each series, designated by a frequency column symbol.

Calling frequencies. Application may be made for one calling frequency column symbol from the "C" series, which represents one frequency in each of the 2, 4, 6, 8, 12, 16, and 22 Mc bands, for each ship. If more than one symbol of the "C" series is allocated for a particular licensee, the general principle to follow is to apply for the first vessel under the first symbol, the second symbol for the second vessel, etc., until the allocated symbols are exhausted. The procedure is then repeated, beginning again with the first symbol. Application for frequency column symbol C5 may additionally be made for vessels having life boats or other survival craft equipped for high frequency radio transmission for use of those frequencies by equipment aboard such lifeboats or survival craft.

Cargo ship working frequencies. Application may be made for one cargo working frequency column symbol, from the "F" series, for each cargo ship, which will include one frequency from the 2 Mc and two frequencies each from the 4, 6, 8, 12, 16 and 22 Mc bands. If more than one symbol of the "F" series is allocated for a particular licensee, the frequency symbols should be applied for in rotation for successive vessels as for calling frequencies.

Passenger ship working frequencies. Application may be made for the number of

TABLE 1-a—PASSENGER SHIP RADIOTELEGRAPH WORKING FREQUENCIES

P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
2067.5	2068.75	2070	2071.25	2072.5	2073.75	2075	2076.25	2077.5	2078.75	2080	2081.25	2082.5	2085	2087.5
4135	4137.5	4140	4142.5	4145	4147.5	4150	4152.5	4155	4157.5	4160	4162.5	4165	4170	4175
6202.5	6206.25	6210	6213.75	6217.5	6221.25	6225	6228.75	6232.5	6236.25	6240	6243.75	6247.5	6255	6262.5
8270	8275	8280	8285	8290	8295	8300	8305	8310	8315	8320	8325	8330	8340	8350
12405	12412.5	12420	12427.5	12435	12442.5	12450	12457.5	12465	12472.5	12480	12487.5	12495	12510	12525
16540	16550	16560	16570	16580	16590	16600	16610	16620	16630	16640	16650	16660	16680	16700
22075	22085	22095	22105	22105	22115	22125	22135	22145	22145	22155	22165	22175	22195	22215

passenger ship working frequencies which, in the best judgment of the applicant, will be essential for the traffic volume of the particular vessel. The frequency column symbols shall be taken from the "P" series, with a minimum of two symbols. If more than two symbols of the "P" series are allocated for a particular licensee, the frequency symbols should be applied for in rotation for successive vessels as for calling frequencies, except that the first symbol for each vessel must be the one after the last of the series of two or more symbols of the previous vessel.

High frequency (Long distance) radiotelephone. Application for all frequencies contained in Table 3 may be made for vessels capable of radiotelephone transmissions on any of these frequencies by designating the frequency column symbol "R1" in the application.

TABLE 1-b—SHIP RADIOTELEGRAPH CALLING FREQUENCIES

C1	C2	C3	C4	C5	C6	C7	C8	C9
2089	2089.5	2090	2090.5	2091	2091.5	2092	2092.5	2093
4178	4179	4180	4181	4182 [1]	4183	4184	4185	4186
6267	6268.5	6270	6271.5	6273 [1]	6274.5	6276	6277.5	6279
8356	8358	8360	8362	8364 [1] [2]	8366	8368	8370	8372
12534	12537	12540	12543	12546 [1]	12549	12552	12555	12551
16712	16716	16720	16724	16728 [1]	16732	16736	16740	16744
22225	22230	22235	22240	22245 [1]	22250	22255	22260	22265

[1] These frequencies are available only to aircraft, and lifeboats and other survival craft, for communication with stations of the Maritime Mobile Service.

[2] Lifeboats and survival craft compulsorily equipped with radio apparatus under international agreement, must be capable of transmitting on this frequency if such apparatus provides for the use of frequencies between 4000 kc and 23,000 kc.

TABLE 1-C—CARGO SHIP WORKING FREQUENCIES

F1	2094	4188 4212.5	6282 6318.75	8376 8425	12564 12637.5	16752 16850	22272.5 22335
F2	2094.25	4188.5 4213	6282.75 6319.5	8377 8426	12565.5 12639	16754 16852	22272.5 22335
F3	2094.5	4189 4213.5	6283.5 6320.25	8378 8427	12567 12640.5	16756 16854	22275 22337.5
F4	2094.75	4189.5 4214	6284.25 6321	8379 8428	12568.5 12642	16758 16856	22275 22337.5
F5	2095	4190 4214.5	6285 6321.75	8380 8429	12570 12643.5	16760 16858	22277.5 22340
F6	2095.25	4190.5 4215	6285.75 6322.5	8381 8430	12571.5 12645	16762 16860	22277.5 22340
F7	2095.5	4191 4215.5	6286.5 6323.25	8382 8431	12573 12646.5	16764 16862	22280 22342.5
F8	2095.75	4191.5 4216	6287.25 6324	8383 8432	12574.5 12648	16766 16864	22280 22342.5
F9	2096	4192 4216.5	6288 6324.75	8384 8433	12576 12649.5	16768 16866	22282.5 22345
F10	2096.25	4192.5 4217	6288.75 6325.5	8385 8434	12577.5 12651	16770 16868	22282.5 22345
F11	2096.5	4193 4217.5	6289.5 6326.25	8386 8435	12579 12652.5	16772 16870	22285 22347.5
F12	2096.75	4193.5 4218	6290.25 6327	8387 8436	12580.5 12654	16774 16872	22285 22347.5
F13	2097	4194 4218.5	6291 6327.75	8388 8437	12582 12655.5	16776 16874	22287.5 22350
F14	2097.25	4194.5 4219	6291.75 6328.5	8389 8438	12583.5 12657	16778 16876	22287.5 22350
F15	2097.5	4195 4219.5	6292.5 6329.25	8390 8439	12585 12658.5	16780 16878	22290 22352.5
F16	2097.75	4195.5 4220	6293.25 6330	8391 8440	12586.5 12660	16782 16880	22290 22352.5
F17	2098	4196 4220.5	6294 6330.75	8392 8441	12588 12661.5	16784 16882	22292.5 22355
F18	2098.25	4196.5 4221	6294.75 6331.5	8393 8442	12589.5 12663	16786 16884	22292.5 22355
F19	2098.5	4197 4221.5	6295.5 6332.25	8394 8443	12591 12664.5	16788 16886	22295 22357.5
F20	2098.75	4197.5 4222	6296.25 6333	8395 8444	12592.5 12666	16790 16888	22295 22357.5
F21	2099	4198 4222.5	6297 6333.75	8396 8445	12594 12667.5	16792 16890	22297.5 22360
F22	2099.25	4198.5 4223	6297.75 6334.5	8397 8446	12595.5 12669	16794 16892	22297.5 22360
F23	2099.5	4199 4223.5	6298.5 6335.25	8398 8447	12597 12670.5	16796 16894	22300 22362.5
F24	2099.75	4199.5 4224	6299.25 6336	8399 8448	12598.5 12672	16798 16896	22300 22362.5
F25	2100	4200 4224.5	6300 6336.75	8400 8449	12600 12673.5	16800 16898	22302.5 22365
F26	2100.25	4200.5 4225	6300.75 6337.5	8401 8450	12601.5 12675	16802 16900	22302.5 22365
F27	2100.5	4201 4225.5	6301.5 6338.25	8402 8451	12603 12676.5	16804 16902	22305 22367.5
F28	2100.75	4201.5 4226	6302.25 6339	8403 8452	12604.5 12678	16806 16904	22305 22367.5
F29	2101	4202 4276.5	6303 6339.75	8404 8453	12606 12679.5	16808 16906	22307.5 22370
F30	2101.25	4202.5 4227	6303.75 6340.5	8405 8454	12607.5 12681	16810 16908	22307.5 22370
F31	2101.5	4203 4227.5	6304.5 6341.25	8406 8455	12609 12682.5	16812 16910	22310 22372.5
F32	2101.75	4203.5 4228	6305.25 6342	8407 8456	12610.5 12684	16814 16912	22310 22372.5
F33	2102	4204 4228.5	6306 6342.75	8408 8457	12612 12685.5	16816 16914	22312.5 22375
F34	2102.25	4204.5 4229	6306.75 6343.5	8409 8458	12613.5 12687	16818 16916	22312.5 22375
F35	2102.5	4205 4229.5	6307.5 6344.25	8410 8459	12615 12688.5	16820 16918	22315 22377.5
F36	2102.75	4205.5 4230	6308.25 6345	8411 8460	12616.5 12690	16822 16920	22315 22377.5
F37	2103	4206 4230.5	6309 6345.75	8412 8461	12618 12691.5	16824 16922	22317.5 22380
F38	2103.25	4206.5 4231	6309.75 6346.5	8413 8462	12619.5 12693	16826 16924	22317.5 22380
F39	2103.5	4207 4231.5	6310.5 6347.25	8414 8463	12621 12694.5	16828 16926	22320 22382.5
F40	2103.75	4207.5 4232	6311.25 6348	8415 8464	12622.5 12696	16830 16928	22320 22382.5
F41	2104	4208 4232.5	6312 6348.75	8416 8465	12624 12697.5	16832 16930	22322.5 22385
F42	2104.25	4208.5 4233	6312.75 6349.5	8417 8466	12625.5 12699	16834 16932	22322.5 22385
F43	2104.5	4209 4233.5	6313.5 6350.25	8418 8467	12627 12700.5	16836 16934	22325 22387.5
F44	2104.75	4209.5 4234	6314.25 6351	8419 8468	12628.5 12702	16838 16936	22325 22387.5
F45	2105	4210 4234.5	6315 6351.75	8420 8469	12630 12703.5	16840 16938	22327.5 22390
F46	2105.25	4210.5 4235	6315.75 6352.5	8421 8470	12631.5 12705	16842 16940	22327.5 22390
F47	2105.5	4211 5235.5	6316.5 6353.25	8422 8471	12633 12706.5	16844 16942	22330 22392.5
F48	2105.75	4211.5 4236	6317.25 6354	8423 8472	12634.5 12708	16846 16944	22330 22392.5
F49	2106	4212 4236.5	6318 6354.75	8424 8473	12636 12709.5	16848 16946	22332.5 22395

TABLE 2—SHIP RADIOTELEGRAPH FREQUENCY ASSIGNMENT PLAN

[For columns of frequencies designated by these symbols, see Table 1, above]

	Calling frequency column symbols	Passenger ship working frequency column symbols	Cargo ship working frequency column symbols
Radiomarine Corp. of America	C3, C5,[1] C7, C9	P3, P7, P10, P11, P13.	F1, F3, F5, F7, F9, F11, F13, F15, F17, F19, F21, F23, F25, F27, F29, F31, F33, F35, F37, F39, F41, F43, F45, F47.
Mackay Radio & Telegraph Co., Inc.	C2, C4, C5,[1] C6	P2, P4, P8	F2, F6, F8, F10, F14, F18, F20, F24, F28, F32, F34, F36, F40, F42, F48.
Tropical Radio Telegraph Co	C5,[1] C8	P6, P12	F4.
Matson Navigation Co	C5,[1] C8	P6, P12	F12.
Globe Wireless Co	C5,[1] C8		F16.
Other applicants:[2]			
A-C	C5,[1] C8	P5, P9	F22.
D-L	C5,[1] C8	P5, P9	F26.
M	C5,[1] C8	P5, P9	F30.
N-R	C5,[1] C8	P5, P9	F38.
S	C5,[1] C8	P5, P9	F44.
T-Z	C5,[1] C8	P5, P9	F46.

[1] See footnotes [1] and [2] in Table 1-b, "Ship Radiotelegraph Calling Frequencies", above.

[2] Applicants other than the above listed companies must apply for the frequency column symbols shown, in alphabetic groups according to the first letter of their name. As an example, if the applicant's name begins with A, B, or C, he may apply only for frequency column symbols C8, P5, and P9, for a passenger ship, or C8 and F22 for a cargo ship. (Frequency symbol C5 may also be requested if lifeboats or other survival craft are radio equipped.) For this purpose, the alphabetic group of first letters of the name will be selected by using the first word of a trade name omitting "The"; the last name of a personal name; or the last name of the first person appearing in a series of personal names. As examples, the following names would all apply for the third, or "M" group; C8; P5 and P9, or F30: Marine Communications, Inc.; A. B. Miller and Co.; C. D. Munsey; E. F. Murphy, Alfred Abrams, et al.

NOTE: The frequencies represented by Symbols C1, P1, P14, P15 and F49 are not available for assignment under this plan.

TABLE 3—SHIP RADIOTELEPHONE FREQUENCIES BETWEEN 4 MC AND 23 MC

Frequency column symbol: R1]

4 Mc		8 Mc		12 Mc		16 Mc		22 Mc	
Coast[1]	Ship	Coast[1]	Ship	Coast[1]	Ship	Coast[1]	Ship	Coast[1]	Ship
4067.0[2]	4067.0[2]	------	------	-------	-------	-------	-------	-------	-------
4372.4	4067.0	8747.6	8198.4	-------	-------	17302.1	16471.9	-------	-------
4372.4[2]	4372.4[2]	8205.5[2]	8205.5	-------	-------	-------	-------	-------	-------
-------	-------	8761.8	8212.6[2]	-------	-------	-------	-------	-------	-------
4393.1	4087.7	8768.9	8219.7	13157.5	12357.3	17317.5	16487.3	22677.5	22027.3
4406.9	4101.5	------	------	13172.9	12372.7	-------	-------	22692.9	22042.7
-------	-------	------	------	13180.6	12380.4	17340.6	16510.4	-------	-------
4420.7	4115.3	8797.3	8248.1	-------	-------	-------	-------	-------	-------
4427.6	4122.2	------	------	13196.0	12395.8	17356.0	16525.8	22716.0	22065.8
4434.5	4129.1	8811.5	8262.3	-------	-------	-------	-------	-------	-------

[1] This tabulation does not authorize ship stations to transmit on coast station frequencies.

[2] Mississippi River System simplex operation only.

§ 8.803 Appendix III—*General exemption orders issued exempting ships from compulsory radio provisions.*

(a) Order, May 8, 1957, granting exemption, pursuant to section 352 (b) (3) of the Communications Act of 1934, as amended, to all United States passenger vessels of less than 100 gross tons, not subject to the radio provisions of the Safety Convention, from the radiotelegraph provisions of Title III, Part II of the Communications Act of 1934, as amended: *Provided*, That the vessels are equipped with a radiotelephone installation fully complying with the provisions of Part III of Title III of the Communications Act of 1934, as amended, and the Commission's rules and regulations made pursuant thereto including the requirements with respect to certificates, operators, and listening watches: *And provided further*, That during the course of the voyages the vessels will not be navigated more than 50 nautical miles from the nearest land.

(b) These exemptions may be terminated at any time without hearing if, in the Commission's discretion, the need for such action arises.

§ 8.804 *Appendix IV—Notices listing coast stations authorized for public ship-shore telephony on 2638 kc.* (a) Notice issued October 11, 1957, listing Allatoona Yacht Club, (WHL) Cartersville, Georgia.

[F. R. Doc. 57-10174; Filed, Dec. 17, 1957; 8:45 a. m.]